

ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy

AECOM

1001 Bishop Street
Honolulu HI 96813

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JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-121397-1

Eurofins Seattle

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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Definitions/Glossary

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-121397-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE
Client: AECOM
Project: Red Hill - AFFF Assessment Sampling
Report Number: 580-121397-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

Four samples were received on 12/17/2022 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.8° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

GLYCOLS - 2-(2-BUTOXYETHOXY)ETHANOL

Samples ADIT6-DU05-SON01MI-22DEC (580-121397-1), ADIT6-DU06-SON01MI-22DEC (580-121397-2),
ADIT6-DU07-SON01MI-22DEC (580-121397-3) and ADIT6-DU08-SON01MI-22DEC (580-121397-4) were analyzed for glycols in accordance with EPA SW-846 Method 8015C DAI. The samples were leached on 12/28/2022 and analyzed on 12/29/2022.

The continuing calibration verification (CCV) associated with batch 680-757248 recovered outside acceptance criteria, low biased, for 2-(2-Butoxyethoxy)ethanol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for the analyte, the data has been reported.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 680-757073 and analytical batch 680-757248 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Samples ADIT6-DU05-SON01MI-22DEC (580-121397-1)[10X] and ADIT6-DU07-SON01MI-22DEC (580-121397-3)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples ADIT6-DU05-SON01MI-22DEC (580-121397-1), ADIT6-DU06-SON01MI-22DEC (580-121397-2),
ADIT6-DU07-SON01MI-22DEC (580-121397-3) and ADIT6-DU08-SON01MI-22DEC (580-121397-4) were analyzed for percent solids in accordance with ASTM D2216. The samples were analyzed on 12/28/2022.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-121397-1

Client Sample ID: ADIT6-DU05-SON01MI-22DEC

Lab Sample ID: 580-121397-1

No Detections.

Client Sample ID: ADIT6-DU06-SON01MI-22DEC

Lab Sample ID: 580-121397-2

No Detections.

Client Sample ID: ADIT6-DU07-SON01MI-22DEC

Lab Sample ID: 580-121397-3

No Detections.

Client Sample ID: ADIT6-DU08-SON01MI-22DEC

Lab Sample ID: 580-121397-4

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-121397-1

Client Sample ID: ADIT6-DU05-SON01MI-22DEC

Date Collected: 12/15/22 15:10

Date Received: 12/17/22 09:00

Lab Sample ID: 580-121397-1

Matrix: Solid

Percent Solids: 81.8

Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID) - Soluble

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	27	U J1 Q M	90	11	mg/Kg	⊗		12/29/22 14:50	10

Client Sample ID: ADIT6-DU06-SON01MI-22DEC

Date Collected: 12/15/22 14:40

Date Received: 12/17/22 09:00

Lab Sample ID: 580-121397-2

Matrix: Solid

Percent Solids: 79.0

Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID) - Soluble

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	1.9	U Q M	6.3	0.78	mg/Kg	⊗		12/29/22 15:58	1

Client Sample ID: ADIT6-DU07-SON01MI-22DEC

Date Collected: 12/15/22 14:55

Date Received: 12/17/22 09:00

Lab Sample ID: 580-121397-3

Matrix: Solid

Percent Solids: 73.3

Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID) - Soluble

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	29	U Q	98	12	mg/Kg	⊗		12/29/22 16:21	10

Client Sample ID: ADIT6-DU08-SON01MI-22DEC

Date Collected: 12/15/22 11:32

Date Received: 12/17/22 09:00

Lab Sample ID: 580-121397-4

Matrix: Solid

Percent Solids: 81.5

Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID) - Soluble

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	2.6	U Q	8.8	1.1	mg/Kg	⊗		12/29/22 16:43	1

Default Detection Limits

Client: AECOM

Job ID: 580-121397-1

Project/Site: Red Hill - AFFF Assessment Sampling

Method: 8015C GLY - Glycols- Direct Injection (GC/FID) - Soluble

Leach: DI Leach

Analyte	LOQ	DL	Units
2-(2-Butoxyethoxy)ethanol	5.0	0.62	mg/Kg

QC Sample Results

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-121397-1

Method: 8015C GLY - Glycols- Direct Injection (GC/FID)

Lab Sample ID: MB 680-757073/1-A

Matrix: Solid

Analysis Batch: 757248

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	1.4	U	4.7	0.58	mg/Kg	D		12/29/22 14:28	1

Lab Sample ID: LCS 680-757073/2-A

Matrix: Solid

Analysis Batch: 757248

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD
2-(2-Butoxyethoxy)ethanol	39.5	39.1		mg/Kg	D	99	50 - 150	

Lab Sample ID: LCSD 680-757073/3-A

Matrix: Solid

Analysis Batch: 757248

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD
2-(2-Butoxyethoxy)ethanol	37.9	45.0		mg/Kg	D	119	50 - 150	14

Lab Sample ID: 580-121397-1 MS

Matrix: Solid

Analysis Batch: 757248

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD
2-(2-Butoxyethoxy)ethanol	27	U J1 Q M	22.9	26	U J1 M	mg/Kg	☀	0	50 - 150	

Lab Sample ID: 580-121397-1 MSD

Matrix: Solid

Analysis Batch: 757248

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD
2-(2-Butoxyethoxy)ethanol	27	U J1 Q M	22.9	2.6	U M J1	mg/Kg	☀	0	50 - 150	NC

Lab Sample ID: 580-121397-1 DU

Matrix: Solid

Analysis Batch: 757248

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD
2-(2-Butoxyethoxy)ethanol	27	U J1 Q M	27	U M Q	mg/Kg	☀	NC

Lab Sample ID: 580-121397-1 TRL

Matrix: Solid

Analysis Batch: 757248

Analyte	Sample Result	Sample Qualifier	TRL Result	TRL Qualifier	Unit	D	RSD
2-(2-Butoxyethoxy)ethanol	27	U J1 Q M	27	U Q	mg/Kg	☀	NC

Client Sample ID: Method Blank
Prep Type: Soluble

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Client Sample ID: ADIT6-DU05-SON01MI-22DEC
Prep Type: Soluble

QC Association Summary

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-121397-1

GC Semi VOA

Leach Batch: 757073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121397-1	ADIT6-DU05-SON01MI-22DEC	Soluble	Solid	DI Leach	
580-121397-2	ADIT6-DU06-SON01MI-22DEC	Soluble	Solid	DI Leach	
580-121397-3	ADIT6-DU07-SON01MI-22DEC	Soluble	Solid	DI Leach	
580-121397-4	ADIT6-DU08-SON01MI-22DEC	Soluble	Solid	DI Leach	
MB 680-757073/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 680-757073/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 680-757073/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
580-121397-1 MS	ADIT6-DU05-SON01MI-22DEC	Soluble	Solid	DI Leach	
580-121397-1 MSD	ADIT6-DU05-SON01MI-22DEC	Soluble	Solid	DI Leach	
580-121397-1 DU	ADIT6-DU05-SON01MI-22DEC	Soluble	Solid	DI Leach	
580-121397-1 TRL	ADIT6-DU05-SON01MI-22DEC	Soluble	Solid	DI Leach	

Analysis Batch: 757248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121397-1	ADIT6-DU05-SON01MI-22DEC	Soluble	Solid	8015C GLY	757073
580-121397-2	ADIT6-DU06-SON01MI-22DEC	Soluble	Solid	8015C GLY	757073
580-121397-3	ADIT6-DU07-SON01MI-22DEC	Soluble	Solid	8015C GLY	757073
580-121397-4	ADIT6-DU08-SON01MI-22DEC	Soluble	Solid	8015C GLY	757073
MB 680-757073/1-A	Method Blank	Soluble	Solid	8015C GLY	757073
LCS 680-757073/2-A	Lab Control Sample	Soluble	Solid	8015C GLY	757073
LCSD 680-757073/3-A	Lab Control Sample Dup	Soluble	Solid	8015C GLY	757073
580-121397-1 MS	ADIT6-DU05-SON01MI-22DEC	Soluble	Solid	8015C GLY	757073
580-121397-1 MSD	ADIT6-DU05-SON01MI-22DEC	Soluble	Solid	8015C GLY	757073
580-121397-1 DU	ADIT6-DU05-SON01MI-22DEC	Soluble	Solid	8015C GLY	757073
580-121397-1 TRL	ADIT6-DU05-SON01MI-22DEC	Soluble	Solid	8015C GLY	757073

General Chemistry

Analysis Batch: 757069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121397-1	ADIT6-DU05-SON01MI-22DEC	Total/NA	Solid	Moisture	
580-121397-2	ADIT6-DU06-SON01MI-22DEC	Total/NA	Solid	Moisture	
580-121397-3	ADIT6-DU07-SON01MI-22DEC	Total/NA	Solid	Moisture	
580-121397-4	ADIT6-DU08-SON01MI-22DEC	Total/NA	Solid	Moisture	

Lab Chronicle

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-121397-1

Client Sample ID: ADIT6-DU05-SON01MI-22DEC

Lab Sample ID: 580-121397-1

Matrix: Solid

Date Collected: 12/15/22 15:10

Date Received: 12/17/22 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	757069	KF	EET SAV	12/28/22 13:21

Client Sample ID: ADIT6-DU05-SON01MI-22DEC

Lab Sample ID: 580-121397-1

Matrix: Solid

Date Collected: 12/15/22 15:10

Date Received: 12/17/22 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			757073	GEM	EET SAV	12/28/22 11:59
Soluble	Analysis	8015C GLY		10	757248	JCK	EET SAV	12/29/22 14:50

Client Sample ID: ADIT6-DU06-SON01MI-22DEC

Lab Sample ID: 580-121397-2

Matrix: Solid

Date Collected: 12/15/22 14:40

Date Received: 12/17/22 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	757069	KF	EET SAV	12/28/22 13:21

Client Sample ID: ADIT6-DU06-SON01MI-22DEC

Lab Sample ID: 580-121397-2

Matrix: Solid

Date Collected: 12/15/22 14:40

Date Received: 12/17/22 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			757073	GEM	EET SAV	12/28/22 11:59
Soluble	Analysis	8015C GLY		1	757248	JCK	EET SAV	12/29/22 15:58

Client Sample ID: ADIT6-DU07-SON01MI-22DEC

Lab Sample ID: 580-121397-3

Matrix: Solid

Date Collected: 12/15/22 14:55

Date Received: 12/17/22 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	757069	KF	EET SAV	12/28/22 13:21

Client Sample ID: ADIT6-DU07-SON01MI-22DEC

Lab Sample ID: 580-121397-3

Matrix: Solid

Date Collected: 12/15/22 14:55

Date Received: 12/17/22 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			757073	GEM	EET SAV	12/28/22 11:59
Soluble	Analysis	8015C GLY		10	757248	JCK	EET SAV	12/29/22 16:21

Client Sample ID: ADIT6-DU08-SON01MI-22DEC

Lab Sample ID: 580-121397-4

Matrix: Solid

Date Collected: 12/15/22 11:32

Date Received: 12/17/22 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	757069	KF	EET SAV	12/28/22 13:21

Eurofins Seattle

Lab Chronicle

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-121397-1

Client Sample ID: ADIT6-DU08-SON01MI-22DEC

Date Collected: 12/15/22 11:32

Date Received: 12/17/22 09:00

Lab Sample ID: 580-121397-4

Matrix: Solid

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			757073	GEM	EET SAV	12/28/22 11:59
Soluble	Analysis	8015C GLY		1	757248	JCK	EET SAV	12/29/22 16:43

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-121397-1

Laboratory: Eurofins Savannah

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2463	09-22-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015C GLY		Solid	2-(2-Butoxyethoxy)ethanol
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-121397-1

Method	Method Description	Protocol	Laboratory
8015C GLY	Glycols- Direct Injection (GC/FID)	SW846	EET SAV
Moisture	Percent Moisture	EPA	EET SAV
DI Leach	Deionized Water Leaching Procedure	ASTM	EET SAV

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Sample Summary

Client: AECOM

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-121397-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-121397-1	ADIT6-DU05-SON01MI-22DEC	Solid	12/15/22 15:10	12/17/22 09:00
580-121397-2	ADIT6-DU06-SON01MI-22DEC	Solid	12/15/22 14:40	12/17/22 09:00
580-121397-3	ADIT6-DU07-SON01MI-22DEC	Solid	12/15/22 14:55	12/17/22 09:00
580-121397-4	ADIT6-DU08-SON01MI-22DEC	Solid	12/15/22 11:32	12/17/22 09:00

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.:

Instrument ID: CVGG2

Analysis Batch Number: 757067

Lab Sample ID: IC 680-757067/5

Client Sample ID:

Date Analyzed: 12/28/22 12:59

Lab File ID: 22GL28005.D

GC Column: J&W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Hydroxy-4-methyl-2-pentanone	4.90	Incomplete Integration	SK9U	12/28/22 15:01

Lab Sample ID: ICIS 680-757067/7

Client Sample ID:

Date Analyzed: 12/28/22 13:44

Lab File ID: 22GL28007.D

GC Column: J&W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	7.83	Incomplete Integration	SK9U	12/28/22 15:01
Ethylene glycol	8.29	Incomplete Integration	SK9U	12/28/22 15:01

Lab Sample ID: IC 680-757067/9

Client Sample ID:

Date Analyzed: 12/28/22 14:29

Lab File ID: 22GL28009.D

GC Column: J&W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	7.84	Baseline Smoothing	SK9U	12/28/22 15:02
Ethylene glycol	8.28	Baseline Smoothing	SK9U	12/28/22 15:02

Lab Sample ID: IC 680-757067/10

Client Sample ID:

Date Analyzed: 12/28/22 14:52

Lab File ID: 22GL28010.D

GC Column: J&W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	7.83	Baseline Smoothing	SK9U	12/28/22 16:13
Ethylene glycol	8.28	Baseline Smoothing	SK9U	12/28/22 16:13

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Instrument ID: CVGG2

Analysis Batch Number: 757248

Lab Sample ID: CCVIS 680-757248/5

Client Sample ID: _____

Date Analyzed: 12/29/22 12:33

Lab File ID: 22GL29005.D

GC Column: J&W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dipropylene Glycol Methyl Ether	6.92	Baseline Smoothing	SK9U	12/29/22 12:55

Lab Sample ID: 580-121397-1

Client Sample ID: ADIT6-DU05-SON01MI-22DEC

Date Analyzed: 12/29/22 14:50

Lab File ID: 22GL29011.D

GC Column: J&W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	12/30/22 10:52

Lab Sample ID: 580-121397-1 DU

Client Sample ID: ADIT6-DU05-SON01MI-22DEC DU

Date Analyzed: 12/29/22 15:13

Lab File ID: 22GL29012.D

GC Column: J&W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	12/30/22 10:53

Lab Sample ID: 580-121397-2

Client Sample ID: ADIT6-DU06-SON01MI-22DEC

Date Analyzed: 12/29/22 15:58

Lab File ID: 22GL29014.D

GC Column: J&W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	12/30/22 10:53

Lab Sample ID: 580-121397-1 MS

Client Sample ID: ADIT6-DU05-SON01MI-22DEC MS

Date Analyzed: 12/29/22 17:06

Lab File ID: 22GL29017.D

GC Column: J&W DB WAX

ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	12/30/22 10:53

8015C GLY

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.:

Instrument ID: CVGG2

Analysis Batch Number: 757248

Lab Sample ID: 580-121397-1 MSD

Client Sample ID: ADIT6-DU05-SON01MI-22DEC MSD

Date Analyzed: 12/29/22 17:29

Lab File ID: 22GL29018.D

GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-(2-Butoxyethoxy)ethanol		Invalid Compound ID	SWK1	12/30/22 10:53

Lab Sample ID: CCV 680-757248/24

Client Sample ID:

Date Analyzed: 12/29/22 19:44

Lab File ID: 22GL29024.D

GC Column: J&W DB WAX ID: 0.45 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Propylene glycol	7.81	Baseline Smoothing	SK9U	12/29/22 20:13
Ethylene glycol	8.27	Baseline Smoothing	SK9U	12/29/22 20:13
Triethylene Glycol	11.18	Incomplete Integration	SK9U	12/29/22 20:17
Tetraethylene Glycol	12.86	Incomplete Integration	SK9U	12/29/22 20:17

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SG_Gly_CAL_00047	02/07/23		o2si, Lot 480919		(Purchased Reagent)		2,2'-Oxybisethanol	2000 ug/mL
							2-(2-Butoxyethoxy)ethanol	2000 ug/mL
							2-Butoxyethanol	2000 ug/mL
							4-Hydroxy-4-methyl-2-pentanone	2000 ug/mL
							Dipropylene Glycol Methyl Ether	2000 ug/mL
							Ethanol, 2-propoxy	2000 ug/mL
							Ethylene glycol	2000 ug/mL
							Propylene glycol	2000 ug/mL
							Tetraethylene Glycol	4000 ug/mL
							Triethylene Glycol	2000 ug/mL
SG_GLY_ITSD_00099	04/25/23		Agilent, Lot 0006670821		(Purchased Reagent)		n-Heptyl Alcohol	5000 ug/mL
SG_GlyICV_00056	05/04/23		o2si, Lot 454407		(Purchased Reagent)		2-(2-Butoxyethoxy)ethanol	2000 ug/mL

Reagent

SG_Gly_CAL_00047



ISO/IEC 17025 Accredited
Chemical Testing Lab
Cert. No. 3031.01



ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

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Page 1 of 3

Catalog No.	Lot No.	Storage	Solvent	Date Received	Exp. Date
G34-120070-04	480919	≤ -10 °C	P/T Methanol		2-May-2024

Description:

ISO 17034 -Custom Volatiles Mix, 105-12, 2000 & 4,000 mg/L, 1 mL

Container:

1 ml Ampule, Amber Glass

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this Certified Reference Material (CRM). This CRM has been confirmed by GC/MS, GC, HPLC, UPLC/HRAM-MS, UV/VIS, Enzymatic, and/or wet chemistry techniques using internally developed method(s) against independent source(s). The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2. The purity of neat materials not traceable to an ISO 17034:2016 accredited Reference Material Provider is traceable to internal analysis by GC, GC/MS, HPLC, Enzymatic, or wet chemistry techniques and compared to a National Metrological Institute such as NIST where feasible.

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration
2-butoxyethanol	111-76-2	99.6	311.9.2P	1986 ± 100 mg/L
diethylene glycol butyl ether	112-34-5	99.8	2323.7.2P	2008 ± 100 mg/L
propyl cellosolve	2807-30-9	99.9	1570.7.2P	1980 ± 100 mg/L
dipropylene glycol monomethyl ether	34590-94-8	99.7	2333.7.2P	2014 ± 100 mg/L
ethylene glycol	107-21-1	100	307.201.1P	1968 ± 99 mg/L
di(ethylene glycol)	111-46-6	99.5	309.7.2P	1994 ± 100 mg/L
tri(ethylene glycol)	112-27-6	99.9	310.7.2.1.1P	1974 ± 110 mg/L
4-Hydroxy-4-methyl-2-pentanone	123-42-2	98	2334.286.1P	1991 ± 110 mg/L
1,2-propanediol	57-55-6	99.5	306.9.3P	1998 ± 100 mg/L
tetraethylene glycol	112-60-7	98	3754.7.1P	3959 ± 200 mg/L

Intended Uses:

This CRM is intended for use as a calibration standard or a quality control standard for chromatography equipment such as GC, GC/MS, HPLC, and HPLC/MS. It may also be used for various USEPA, NIOSH and ASTM methods.

Recommended storage container for ampuled products after opening is a 12 mm x 32 mm amber vial with screw cap Teflon lined silicon septum. The modeled % change per day can be calculated using the following:

Certificate of Analysis

Page 2 of 3

Catalog No. G34-120070-04

Lot No. 480919

Expiration Date 2 -May-2024

$$\% \text{ Change} = 116192x^{-2.578} + 40.383e^{-0.03y}$$

where x = boiling point of the most volatile analyte in the mix (in degrees K)
y = boiling point of the solvent (in degrees K)

This model assumes the container is stored at -10 °C and is unopened during storage. The user should determine what the acceptable error for their process is and calculate the maximum number of days the opened ampule should be stored.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with National Institute of Standards and Technology (NIST) traceable weights (NIST Test Numbers 822/273070-06, 822/275141-07, 822/278993-10). Only calibrated Class A volumetric glassware and/or calibrated syringes were used to prepare this standard. Raw materials may have been checked for stoichiometry and purity prior to use. This standard has been analyzed against an independent source.

Packaging and Storage:

The solution should be stored according to the following storage requirements: ≤ -10 °C

Once the product is opened, it should be transferred to a vial with minimum head space if the product was received in a sealed ampule.

Glassware Calibration:

Only Class A glassware and/or calibrated syringes are used in the manufacture and quality control of standards. All glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used to perform daily checks on balances are calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to NIST. Balances are checked daily in accordance to procedure O2-LB-G-002. Balances are calibrated annually by an ISO/IEC 17025:2017 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-011 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC 17025:2017 and ISO 17034:2016. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

The following equations are used to calculate the value of the expanded uncertainty:

$u = ku_c$ u = Expanded Uncertainty, k = the coverage factor at the 95% confidence level, k = 2, u_c = the combined uncertainty

$u_c = (u_{\text{char}}^2 + u_{\text{tran}}^2 + u_{\text{homo}}^2 + u_{\text{ls}}^2)^{1/2}$ where u_i are the individual uncertainty components for manufacturing, transportation, homogeneity, and shelf life. While no significant uncertainty was detected in the replicates, a minimum contribution to

Manufactured By:



Brian Stokes
3 -May-2022

Production Chemist I

Certified By:



Tyler Sherman
14 -Jun-2022

Quality Control Chemist I

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Released By:



Susan Mathews
14 -Jun-2022

Quality Control Team Lead

Certificate of Analysis

Page 3 of 3

Catalog No. G34-120070-04

Lot No. 480919

Expiration Date 2-May-2024

uncertainty was added for homogeneity and long term stability as described in ISO Guide 35:2017.

Expiration Information:

The stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. Studies on the short term instability have determined no contribution to instability as observed on the concentration under controlled transportation conditions. This standard is guaranteed until 2-May-2024

Quality Standard Documentation:

- ISO/IEC 17025:2017 "General Requirements for the Competence of Testing and Calibration" - Chemical Testing - Accredited A2LA Certificate Number 3031.01
- ISO 17034:2016 "General Requirements for the Competence of Reference Material Producers" - Reference Material Production - Accredited A2LA Certificate Number 3031.02

Manufactured By:



Brian Stokes

3-May-2022

Production Chemist I

Certified By:



Tyler Sherman

14-Jun-2022

Quality Control Chemist I

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Released By:



Susan Mathews

14-Jun-2022

Quality Control Team Lead

Reagent

SG_GLY_ISTD_00099

Reference Material Certificate

Product Name: Custom Standard **Lot Number:** 0006670821
Product Number: CUS-6046 **Lot Issue Date:** 14-Mar-2022
Storage Conditions: Store at Room Temperature (15° to 30°C). **Expiration Date:** 30-Apr-2024

Component Name	CERTIFIED VALUES			CAS#	Analyte Lot
	Concentration	Expanded Uncertainty			
n-heptanol	5024	± 25 µg/mL		000111-70-6	RM04540

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was utilized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:

This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

ISO 17034



Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative



ISO 17034 Cert
No. AR-1936

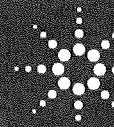
RM was produced in accordance with the TUV/SUD registered ISO 9001:2015
Quality Management System. Cert# 951215321
Page: 2 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937

ISO 17034



Agilent

Trusted Answers

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

A handwritten signature in black ink that appears to read "Monica Bourgeois".

Monica Bourgeois
QMS Representative



ISO 17034 Cert
No. AR-1936

RM was produced in accordance with the TUV/SUD registered ISO 9001:2015
Quality Management System. Cert# 951215321

Page: 2 of 2

www.agilent.com/quality/
CSD-QA-015.1



ISO 17025 Cert
No. AT-1937

Reagent

SG_GlyICV_00056



ISO/IEC 17025 Accredited
Chemical Testing Lab
Cert. No. 3031.01



ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Rev 0

Certificate of Analysis

Page 1 of 3

Catalog No.	Lot No.	Storage	Solvent	Date Received	Exp. Date
G34-120070-04-SS	454407	≤ -10 °C	P/T Methanol		1-Jul-2023

Description:

ISO 17034 -Custom Volatiles Mix,105-12, Second Source, 2000 & 4,000 mg/L, 1 mL

Container:

1 ml Ampule, Amber Glass

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this Certified Reference Material (CRM). This CRM has been confirmed by GC/MS, GC, HPLC, UPLC/HRAM-MS, UV/VIS, Enzymatic, and/or wet chemistry techniques using internally developed method(s) against independent source(s). The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2. The purity of neat materials not traceable to an ISO 17034:2016 accredited Reference Material Provider is traceable to internal analysis by GC, GC/MS, HPLC, Enzymatic, or wet chemistry techniques and compared to a National Metrological Institute such as NIST where feasible.

Compound	CAS No.	Purity (%)	Neat Material Lot No.	Concentration
2-butoxyethanol	111-76-2	99.5	311.7.1.1S	1994 ± 100 mg/L
diethylene glycol butyl ether	112-34-5	99.8	2323.7.2.1S	1992 ± 100 mg/L
2-propoxyethanol	2807-30-9	99.5	1570.7.1S	1998 ± 110 mg/L
dipropylene glycol monomethyl ether	34590-94-8	99.7	2333.7.2.1S	1998 ± 100 mg/L
ethylene glycol	107-21-1	100	307.201.1.1S	2016 ± 100 mg/L
di(ethylene glycol)	111-46-6	99.9	309.7.1.1S	1998 ± 100 mg/L
tri(ethylene glycol)	112-27-6	99.9	310.7.3.1S	2010 ± 100 mg/L
4-Hydroxy-4-methyl-2-pentanone	123-42-2	98	2334.286.1.1S	2003 ± 110 mg/L
1,2-propanediol	57-55-6	99.6	306.370.1.1S	2004 ± 110 mg/L
tetraethylene glycol	112-60-7	98	3754.7.1.1S	4049 ± 200 mg/L

Intended Uses:

This CRM is intended for use as a calibration standard or a quality control standard for chromatography equipment such as GC, GC/MS, HPLC, and HPLC/MS. It may also be used for various USEPA, NIOSH and ASTM methods.

Recommended storage container for ampuled products after opening is a 12 mm x 32 mm amber vial with screw cap Teflon lined silicon septum. The modeled % change per day can be calculated using the following:

Certificate of Analysis

Page 2 of 3

Catalog No. G34-120070-04-SS

Lot No. 454407

Expiration Date 1-Jul-2023

$$\% \text{ Change} = 116192x^{-2.578} + 40.383e^{-0.03y}$$

where x = boiling point of the most volatile analyte in the mix (in degrees K)
y = boiling point of the solvent (in degrees K)

This model assumes the container is stored at -10 °C and is unopened during storage. The user should determine what the acceptable error for their process is and calculate the maximum number of days the opened ampule should be stored.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with National Institute of Standards and Technology (NIST) traceable weights (NIST Test Numbers 822/273070-06, 822/275141-07, 822/278993-10). Only calibrated Class A volumetric glassware and/or calibrated syringes were used to prepare this standard. Raw materials may have been checked for stoichiometry and purity prior to use. This standard has been analyzed against an independent source.

Packaging and Storage:

The solution should be stored according to the following storage requirements: ≤ -10 °C

Once the product is opened, it should be transferred to a vial with minimum head space if the product was received in a sealed ampule.

Glassware Calibration:

Only Class A glassware and/or calibrated syringes are used in the manufacture and quality control of standards. All glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used to perform daily checks on balances are calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to NIST. Balances are checked daily in accordance to procedure O2-LB-G-002. Balances are calibrated annually by an ISO/IEC 17025:2017 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-011 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC 17025:2017 and ISO 17034:2016. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous Information:

Refer to MSDS.

Calculation of Uncertainty:

The following equations are used to calculate the value of the expanded uncertainty:

$u = ku_c$ u = Expanded Uncertainty, k = the coverage factor at the 95% confidence level, k = 2, u_c = the combined uncertainty
 $u_c = (u_{\text{char}}^2 + u_{\text{tran}}^2 + u_{\text{homo}}^2 + u_{\text{ls}}^2)^{1/2}$ where u_i are the individual uncertainty components for manufacturing, transportation, homogeneity, and shelf life. While no significant uncertainty was detected in the replicates, a minimum contribution to

Manufactured By:

Jared Ball
1-Jul-2021

Quality Control Chemist I

Certified By:

Claire Desrochers
7-Jul-2021

Quality Control Chemist I

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Released By:

Susan Mathews
8-Jul-2021

Quality Control Team Lead

Certificate of Analysis

Page 3 of 3

Catalog No. G34-120070-04-SS

Lot No. 454407

Expiration Date 1-Jul-2023

uncertainty was added for homogeneity and long term stability as described in ISO Guide 35:2017.

Expiration Information:

The stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. Studies on the short term instability have determined no contribution to instability as observed on the concentration under controlled transportation conditions. This standard is guaranteed until 1-Jul-2023

Quality Standard Documentation:

- ISO/IEC 17025:2017 "General Requirements for the Competence of Testing and Calibration" - Chemical Testing - Accredited A2LA Certificate Number 3031.01
- ISO 17034:2016 "General Requirements for the Competence of Reference Material Producers" - Reference Material Production - Accredited A2LA Certificate Number 3031.02

Manufactured By:

Jared Ball

1 -Jul-2021

Quality Control Chemist I

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Claire Desrochers

7 -Jul-2021

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Released By:

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8 -Jul-2021

Quality Control Team Lead

Method 8015C - DAI Glycols

**Glycols -Direct Injection (GC/FID) -
Method 8015C**

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Matrix: Solid (Soluble) Level: Low Lab File ID: 22GL29006.D

Lab ID: LCS 680-757073/2-A Client ID: _____

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	39.5	39.1	99	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM III
GC SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-121397-1

SDG No.: _____

Matrix: Solid (Soluble) Level: Low Lab File ID: 22GL29007.D

Lab ID: LCSD 680-757073/3-A Client ID: _____

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD %	REC	QC LIMITS		#
					RPD	REC	
2-(2-Butoxyethoxy)ethanol	37.9	45.0	119	14	50	50-150	

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM III
GC SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-121397-1

SDG No.: _____

Matrix: Solid (Soluble) Level: Low Lab File ID: 22GL29017.D

Lab ID: 580-121397-1 MS Client ID: ADIT6-DU05-SON01MI-22DEC MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
2-(2-Butoxyethoxy)ethanol	22.9	27 U	26 U	0	50-150	J1 M

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

FORM III
GC SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Savannah Job No.: 580-121397-1

SDG No.: _____

Matrix: Solid (Soluble) Level: Low Lab File ID: 22GL29018.D

Lab ID: 580-121397-1 MSD Client ID: ADIT6-DU05-SON01MI-22DEC MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD %	%	QC LIMITS		#
					REC	RPD	
2-(2-Butoxyethoxy)ethanol	22.9	2.6 U	0	NC	50	50-150	M J1

Column to be used to flag recovery and RPD values

FORM III 8015C GLY

GC SEMI VOA DUPLICATE SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-121397-1
SDG No.: _____
Matrix: Solid (Soluble) Level: Low Lab File ID: 22GL29012.D
Lab ID: 580-121397-1 DU Client ID: ADIT6-DU05-SON01MI-22DEC DU

COMPOUND	SAMPLE CONCENTRATION (mg/Kg)	DUPLICATE CONCENTRATION (mg/Kg)	%RPD	%RPD LIMIT	#
2-(2-Butoxyethoxy) ethanol	27 U	27 U	NC	50	

Column to be used to flag %RPD values
8015C GLY

GC SEMI VOA TRIPPLICATE SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-121397-1

SDG No.: _____

Matrix: Solid (Soluble) Level: Low Lab File ID: 22GL29013.DLab ID: 580-121397-1 TRL Client ID: ADIT6-DU05-SON01MI-22DEC TRL

COMPOUND	SAMPLE CONC. (mg/Kg)	DUPLICATE CONC. (mg/Kg)	TRIPPLICATE CONC. (mg/Kg)	%RSD	%RSD LIMIT	#
2-(2-Butoxyethoxy) ethanol	27 U	27 U	27 U	NC	50	

Column to be used to flag %RSD

8015C GLY

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-121397-1
SDG No.: _____
Lab Sample ID: MB 680-757073/1-A
Matrix: Solid (Soluble) Date Extracted: _____
Lab File ID: (1) 22GL29010.D Lab File ID: (2) _____
Date Analyzed: (1) 12/29/2022 14:28 Date Analyzed: (2) _____
Instrument ID: (1) CVGG2 Instrument ID: (2) _____
GC Column: (1) J&W DB WAX ID: 0.45 (mm) GC Column: (2) _____ ID: _____

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 680-757073/2-A	12/29/2022 12:57	
	LCSD 680-757073/3-A	12/29/2022 13:20	
ADIT6-DU05-SON01MI-22DEC	580-121397-1	12/29/2022 14:50	
ADIT6-DU05-SON01MI-22DEC DU	580-121397-1 DU	12/29/2022 15:13	
ADIT6-DU05-SON01MI-22DEC TRL	580-121397-1 TRL	12/29/2022 15:36	
ADIT6-DU06-SON01MI-22DEC	580-121397-2	12/29/2022 15:58	
ADIT6-DU07-SON01MI-22DEC	580-121397-3	12/29/2022 16:21	
ADIT6-DU08-SON01MI-22DEC	580-121397-4	12/29/2022 16:43	
ADIT6-DU05-SON01MI-22DEC MS	580-121397-1 MS	12/29/2022 17:06	
ADIT6-DU05-SON01MI-22DEC MSD	580-121397-1 MSD	12/29/2022 17:29	

FORM VIII
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-121397-1
SDG No.: _____
Sample No.: ICIS 680-757067/7 Date Analyzed: 12/28/2022 13:44
Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm)
Lab File ID (Standard): 22GL28007.D Heated Purge: (Y/N) N
Calibration ID: 88756

	nHPA		#	RT #	#	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	7896964	5.79				
UPPER LIMIT	15793928	6.29				
LOWER LIMIT	3948482	5.29				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 680-757067/11		7473586	5.79			
CCV						

nHPA = n-Heptyl Alcohol

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-121397-1
SDG No.: _____
Sample No.: CCVIS 680-757248/5 Date Analyzed: 12/29/2022 12:33
Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm)
Lab File ID (Standard): 22GL29005.D Heated Purge: (Y/N) N
Calibration ID: 88756

	nHPA		#	RT #	#	RT #
	AREA #	RT #				
12/24 HOUR STD	4336532	5.79				
UPPER LIMIT	8673064	6.29				
LOWER LIMIT	2168266	5.29				
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 680-757073/2-A		4555811	5.79			
LCSD 680-757073/3-A		3814816	5.79			
MB 680-757073/1-A		6208429	5.79			
580-121397-1	ADIT6-DU05-SON01MI- 22DEC	7832627	5.78			
580-121397-1 DU	ADIT6-DU05-SON01MI- 22DEC DU	7892281	5.79			
580-121397-1 TRL	ADIT6-DU05-SON01MI- 22DEC TRL	7874537	5.79			
580-121397-2	ADIT6-DU06-SON01MI- 22DEC	7919479	5.78			
580-121397-3	ADIT6-DU07-SON01MI- 22DEC	7598175	5.78			
580-121397-4	ADIT6-DU08-SON01MI- 22DEC	7912612	5.79			
580-121397-1 MS	ADIT6-DU05-SON01MI- 22DEC MS	7494321	5.79			
580-121397-1 MSD	ADIT6-DU05-SON01MI- 22DEC MSD	6991337	5.78			
CCV 680-757248/24		8369231	5.79			

nHPA = n-Heptyl Alcohol

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Client Sample ID: ADIT6-DU05-SON01MI-22DEC

Lab Sample ID: 580-121397-1

Matrix: Solid (Soluble)

Lab File ID: 22GL29011.D

Analysis Method: 8015C GLY

Date Collected: 12/15/2022 15:10

Extraction Method: _____

Date Extracted: _____

Sample wt/vol: 1 (mL)

Date Analyzed: 12/29/2022 14:50

Con. Extract Vol.: 1 (mL)

Dilution Factor: 10

Injection Volume: 1 (uL)

GC Column: J&W DB WAX ID: 0.45 (mm)

% Moisture: 18.2 % Solids: 81.8

GPC Cleanup: (Y/N) N

Cleanup Factor: _____

Analysis Batch No.: 757248

Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	27	U J1 Q M	90	27	11

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29011.D
 Lims ID: 580-121397-C-1-A
 Client ID: ADIT6-DU05-SON01MI-22DEC
 Sample Type: Client
 Inject. Date: 29-Dec-2022 14:50:49 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 10.0000
 Sample Info: 680-0083017-011 Instrument ID: CVGG2
 Operator ID:
 Method: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:09 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221228-82994.b\\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SWK1 Date: 30-Dec-2022 10:52:57

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol

5.783 5.785 -0.002 7832627 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent
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Report Date: 30-Dec-2022 10:54:43

Chrom Revision: 2.3 20-Dec-2022 14:14:06

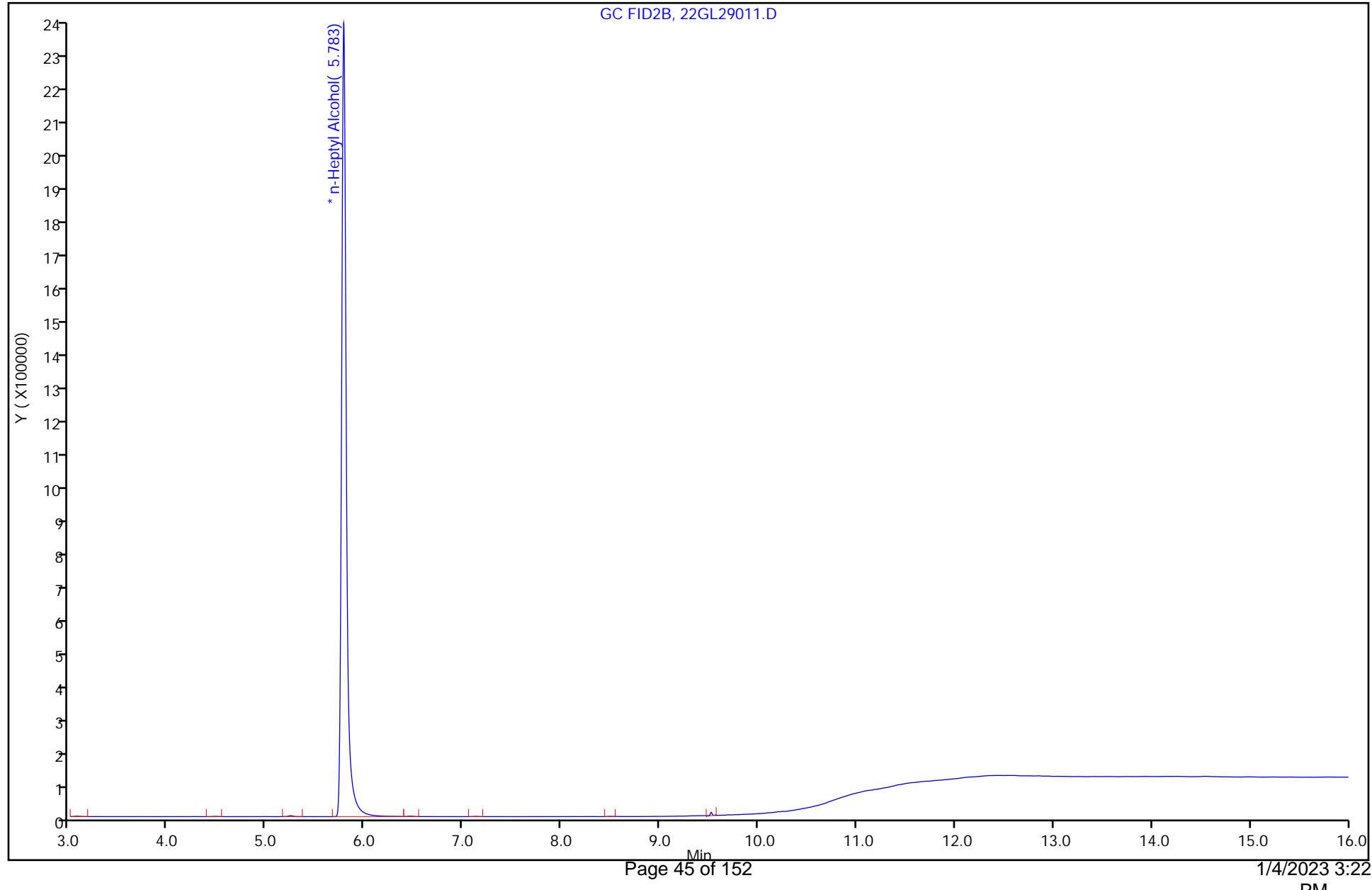
Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29011.D
Injection Date: 29-Dec-2022 14:50:49
Lims ID: 580-121397-C-1-A
Client ID: ADIT6-DU05-SON01MI-22DEC
Injection Vol: 1.0 ul
Method: 8015_GLY_VGG
Column: J&W DB WAX (0.45 mm)

Operator ID:
Worklist Smp#: 11

ALS Bottle#: 11

GC FID2B, 22GL29011.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Client Sample ID: ADIT6-DU06-SON01MI-22DEC

Lab Sample ID: 580-121397-2

Matrix: Solid (Soluble)

Lab File ID: 22GL29014.D

Analysis Method: 8015C GLY

Date Collected: 12/15/2022 14:40

Extraction Method: _____

Date Extracted: _____

Sample wt/vol: 1 (mL)

Date Analyzed: 12/29/2022 15:58

Con. Extract Vol.: 1 (mL)

Dilution Factor: 1

Injection Volume: 1 (uL)

GC Column: J&W DB WAX ID: 0.45 (mm)

% Moisture: 21.0 % Solids: 79.0

GPC Cleanup: (Y/N) N

Cleanup Factor: _____

Analysis Batch No.: 757248

Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	1.9	U Q M	6.3	1.9	0.78

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29014.D
 Lims ID: 580-121397-B-2-A
 Client ID: ADIT6-DU06-SON01MI-22DEC
 Sample Type: Client
 Inject. Date: 29-Dec-2022 15:58:39 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0083017-014
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:09 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SWK1 Date: 30-Dec-2022 10:53:13

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol

5.783 5.785 -0.002 7919479 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00099 Amount Added: 10.00 Units: uL Run Reagent

Report Date: 30-Dec-2022 10:54:44

Chrom Revision: 2.3 20-Dec-2022 14:14:06

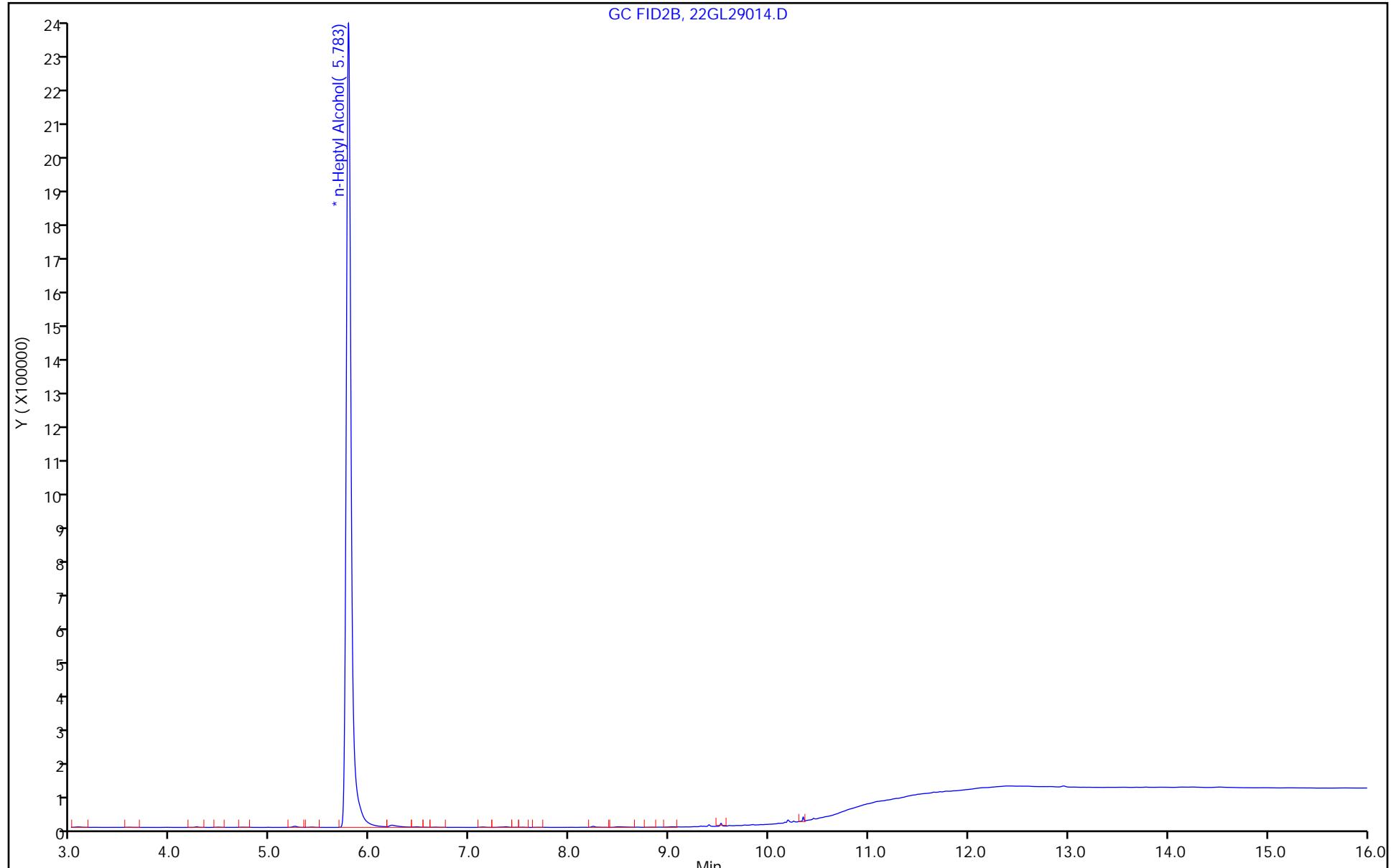
Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29014.D
Injection Date: 29-Dec-2022 15:58:39 Instrument ID: CVGG2
Lims ID: 580-121397-B-2-A Lab Sample ID: 680-121397-2
Client ID: ADIT6-DU06-SON01MI-22DEC
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Operator ID:
Worklist Smp#: 14

ALS Bottle#: 14

GC FID2B, 22GL29014.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Client Sample ID: ADIT6-DU07-SON01MI-22DEC

Lab Sample ID: 580-121397-3

Matrix: Solid (Soluble)

Lab File ID: 22GL29015.D

Analysis Method: 8015C GLY

Date Collected: 12/15/2022 14:55

Extraction Method: _____

Date Extracted: _____

Sample wt/vol: 1 (mL)

Date Analyzed: 12/29/2022 16:21

Con. Extract Vol.: 1 (mL)

Dilution Factor: 10

Injection Volume: 1 (uL)

GC Column: J&W DB WAX ID: 0.45 (mm)

% Moisture: 26.7 % Solids: 73.3

GPC Cleanup: (Y/N) N

Cleanup Factor: _____

Analysis Batch No.: 757248

Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	29	U Q	98	29	12

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29015.D
 Lims ID: 580-121397-B-3-A
 Client ID: ADIT6-DU07-SON01MI-22DEC
 Sample Type: Client
 Inject. Date: 29-Dec-2022 16:21:14 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 1.0 ul Dil. Factor: 10.0000
 Sample Info: 680-0083017-015 Instrument ID: CVGG2
 Operator ID:
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:09 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SWK1 Date: 30-Dec-2022 10:53:16

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol

5.783 5.785 -0.002 7598175 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent
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Report Date: 30-Dec-2022 10:54:44

Chrom Revision: 2.3 20-Dec-2022 14:14:06

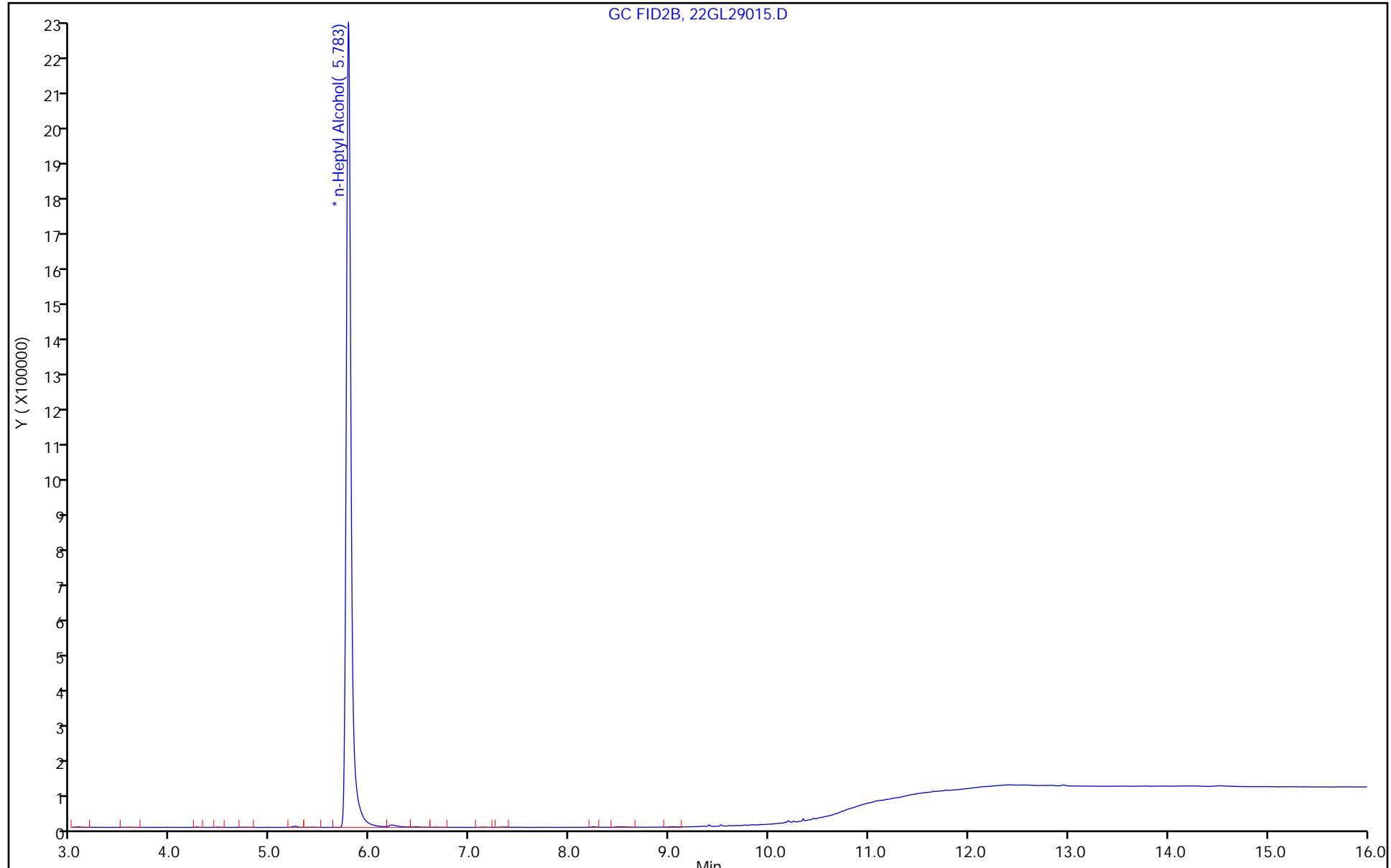
Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29015.D
Injection Date: 29-Dec-2022 16:21:14 Instrument ID: CVGG2
Lims ID: 580-121397-B-3-A Lab Sample ID: 680-121397-3
Client ID: ADIT6-DU07-SON01MI-22DEC
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Operator ID:
Worklist Smp#: 15

ALS Bottle#: 15

GC FID2B, 22GL29015.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Client Sample ID: ADIT6-DU08-SON01MI-22DEC

Lab Sample ID: 580-121397-4

Matrix: Solid (Soluble)

Lab File ID: 22GL29016.D

Analysis Method: 8015C GLY

Date Collected: 12/15/2022 11:32

Extraction Method: _____

Date Extracted: _____

Sample wt/vol: 1 (mL)

Date Analyzed: 12/29/2022 16:43

Con. Extract Vol.: 1 (mL)

Dilution Factor: 1

Injection Volume: 1 (uL)

GC Column: J&W DB WAX ID: 0.45 (mm)

% Moisture: 18.5 % Solids: 81.5

GPC Cleanup: (Y/N) N

Cleanup Factor: _____

Analysis Batch No.: 757248

Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	2.6	U Q	8.8	2.6	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29016.D
 Lims ID: 580-121397-B-4-A
 Client ID: ADIT6-DU08-SON01MI-22DEC
 Sample Type: Client
 Inject. Date: 29-Dec-2022 16:43:56 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0083017-016 Instrument ID: CVGG2
 Operator ID:
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:09 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SWK1 Date: 30-Dec-2022 10:53:18

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol

5.785 5.785 0.000 7912612 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00099 Amount Added: 10.00 Units: uL Run Reagent

Report Date: 30-Dec-2022 10:54:44

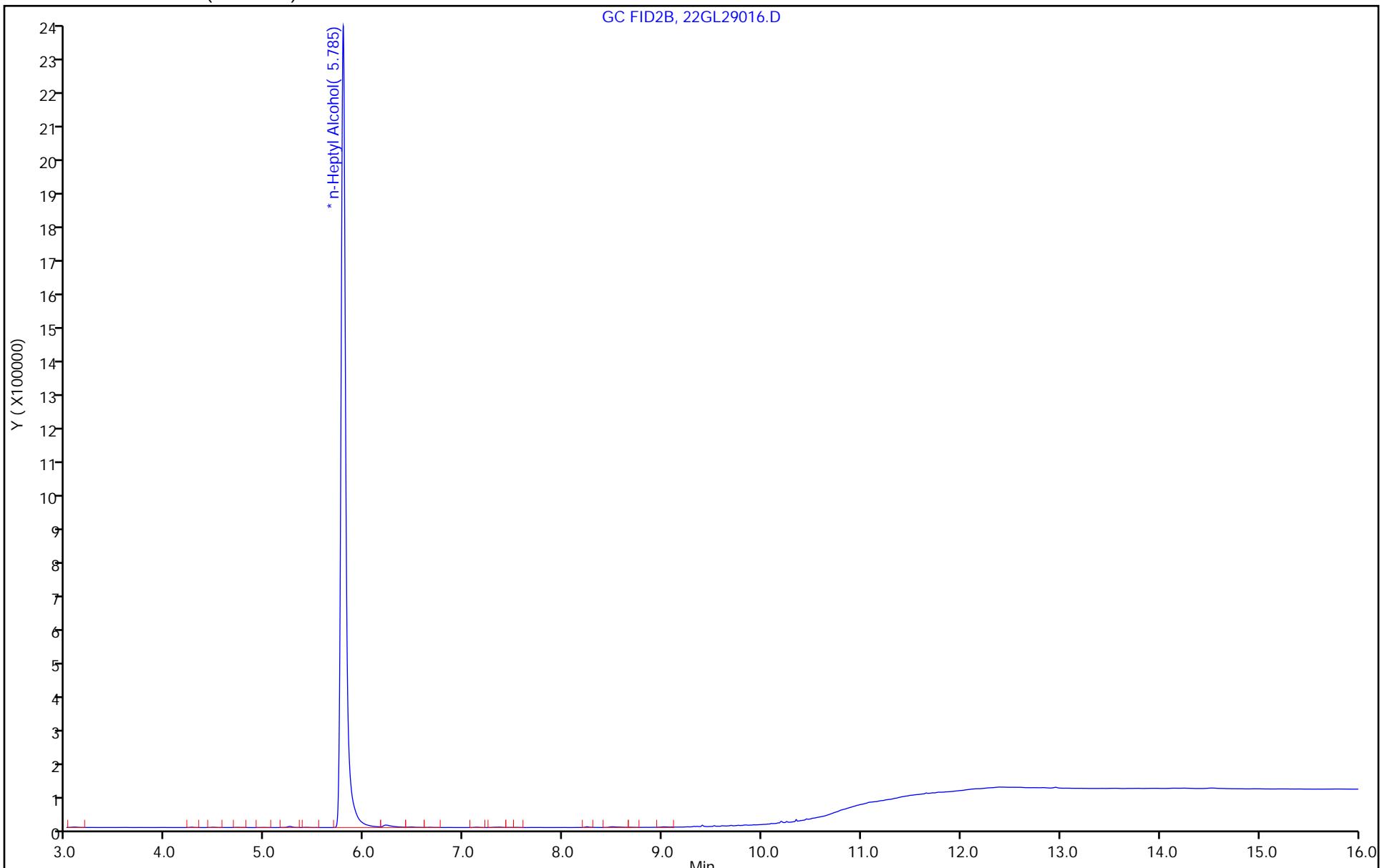
Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29016.D
Injection Date: 29-Dec-2022 16:43:56 Instrument ID: CVGG2
Lims ID: 580-121397-B-4-A Lab Sample ID: 680-121397-4
Client ID: ADIT6-DU08-SON01MI-22DEC
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Operator ID:
Worklist Smp#: 16

ALS Bottle#: 16



FORM VI
GC SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Savannah Job No.: 580-121397-1 Analy Batch No.: 757067
SDG No.: _____
Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 12/28/2022 12:59 Calibration End Date: 12/28/2022 14:52 Calibration ID: 88756

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-757067/5	22GL28005.D
Level 2	IC 680-757067/6	22GL28006.D
Level 3	ICIS 680-757067/7	22GL28007.D
Level 4	IC 680-757067/8	22GL28008.D
Level 5	IC 680-757067/9	22GL28009.D
Level 6	IC 680-757067/10	22GL28010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethanol, 2-propoxy	0.7023 0.5891	0.6203	0.5383	0.5366	0.5137	Lin2	0.854 1	0.527 5							0.9950		0.9900
4-Hydroxy-4-methyl-2-pentanone	0.7572 0.6306	0.6697	0.5827	0.5708	0.5495	Lin2	0.950 9	0.564 5							0.9950		0.9900
2-Butoxyethanol	0.7622 0.6367	0.6671	0.5784	0.5764	0.5526	Lin2	0.947 1	0.567 0							0.9940		0.9900
Dipropylene Glycol Methyl Ether	0.0645 0.0543	0.0567	0.0477	0.0484	0.0469	Lin2	0.080 9	0.047 8							0.9920		0.9900
Propylene glycol	0.5482 0.4528	0.4865	0.4126	0.4127	0.3993	Lin2	0.701 4	0.406 1							0.9950		0.9900
Ethylene glycol	0.4675 0.3748	0.4157	0.3548	0.3529	0.3361	Lin2	0.627 4	0.342 6							0.9960		0.9900
2-(2-Butoxyethoxy)ethanol	0.7402 0.5956	0.6254	0.5286	0.5316	0.5138	Lin2	1.046 5	0.520 7							0.9920		0.9900
2,2'-Oxybisethanol	0.4898 0.3726	0.4036	0.3487	0.3422	0.3290	Lin2	0.760 4	0.331 2							0.9950		0.9900
Triethylene Glycol	0.4701 0.3665	0.3634	0.3331	0.3265	0.3177	Lin2	0.682 5	0.318 3							0.9910		0.9900
Tetraethylene Glycol	0.4725 0.3613	0.3639	0.3188	0.3132	0.3131	Lin1	0.957 1	0.325 8							0.9900		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

Analy Batch No.: 757067

SDG No.: _____

Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/28/2022 12:59 Calibration End Date: 12/28/2022 14:52 Calibration ID: 88756

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-757067/5	22GL28005.D
Level 2	IC 680-757067/6	22GL28006.D
Level 3	ICIS 680-757067/7	22GL28007.D
Level 4	IC 680-757067/8	22GL28008.D
Level 5	IC 680-757067/9	22GL28009.D
Level 6	IC 680-757067/10	22GL28010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Ethanol, 2-propoxy	nHPA	Lin2	475506 8435958	779918	1700251	3587750	5954336	5.00 100	10.0	20.0	50.0	80.0
4-Hydroxy-4-methyl-2-pentanone	nHPA	Lin2	512668 9031131	842091	1840594	3816878	6369012	5.00 100	10.0	20.0	50.0	80.0
2-Butoxyethanol	nHPA	Lin2	516070 9118479	838827	1827057	3854091	6405487	5.00 100	10.0	20.0	50.0	80.0
Dipropylene Glycol Methyl Ether	nHPA	Lin2	43680 777900	71323	150630	323400	543106	5.00 100	10.0	20.0	50.0	80.0
Propylene glycol	nHPA	Lin2	371184 6484980	611714	1303224	2759835	4628229	5.00 100	10.0	20.0	50.0	80.0
Ethylene glycol	nHPA	Lin2	316571 5367464	522652	1120872	2360006	3896125	5.00 100	10.0	20.0	50.0	80.0
2-(2-Butoxyethoxy)ethanol	nHPA	Lin2	501195 8529204	786332	1669648	3554683	5956132	5.00 100	10.0	20.0	50.0	80.0
2,2'-Oxybisethanol	nHPA	Lin2	331612 5336159	507444	1101381	2287951	3813604	5.00 100	10.0	20.0	50.0	80.0
Triethylene Glycol	nHPA	Lin2	318324 5248662	456985	1052326	2183035	3682443	5.00 100	10.0	20.0	50.0	80.0
Tetraethylene Glycol	nHPA	Lin1	639832 10347057	915062	2013966	4188469	7258799	10.0 200	20.0	40.0	100	160

Curve Type Legend

Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

FORM VI
GC SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Savannah Job No.: 580-121397-1 Analy Batch No.: 757067

SDG No.: _____

Instrument ID: CVGG2 GC Column: J&W DB WAX ID: 0.45 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/28/2022 12:59 Calibration End Date: 12/28/2022 14:52 Calibration ID: 88756

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-757067/5	22GL28005.D
Level 2	IC 680-757067/6	22GL28006.D
Level 3	ICIS 680-757067/7	22GL28007.D
Level 4	IC 680-757067/8	22GL28008.D
Level 5	IC 680-757067/9	22GL28009.D
Level 6	IC 680-757067/10	22GL28010.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Ethanol, 2-propoxy	0.8	1.4	-6.1	-1.5	-4.6	10.1	20	20	20	20	20	20
4-Hydroxy-4-methyl-2-pentanone	0.4	1.8	-5.2	-2.3	-4.8	10.0	20	20	20	20	20	20
2-Butoxyethanol	1.0	1.0	-6.3	-1.7	-4.6	10.6	20	20	20	20	20	20
Dipropylene Glycol Methyl Ether	1.2	1.8	-8.7	-2.2	-4.1	12.0	20	20	20	20	20	20
Propylene glycol	0.4	2.5	-7.1	-1.8	-3.8	9.8	20	20	20	20	20	20
Ethylene glycol	-0.2	3.0	-5.6	-0.6	-4.2	7.6	20	20	20	20	20	20
2-(2-Butoxyethoxy)ethanol	2.0	0.0	-8.5	-1.9	-3.8	12.4	20	20	20	20	20	20
2,2'-Oxybisethanol	2.0	-1.1	-6.2	-1.3	-3.5	10.2	20	20	20	20	20	20
Triethylene Glycol	4.8	-7.2	-6.0	-1.7	-2.9	13.0	20	20	20	20	20	20
Tetraethylene Glycol	15.6	-3.0	-9.5	-6.8	-5.7	9.4	20	20	20	20	20	20

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28005.D
 Lims ID: ic g1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 28-Dec-2022 12:59:34 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0082994-005
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 28-Dec-2022 16:16:41 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1625

First Level Reviewer: SK9U Date: 28-Dec-2022 15:01:11

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Ethanol, 2-propoxy						
4.081	4.082	-0.001	475506	5.00	5.04	
2 4-Hydroxy-4-methyl-2-pentanone					M	
4.904	4.910	-0.006	512668	5.00	5.02	M
3 2-Butoxyethanol						
5.272	5.270	0.002	516070	5.00	5.05	
* 4 n-Heptyl Alcohol						
5.798	5.794	0.004	6770882	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.925	6.921	0.004	43680	5.00	5.06	
6 Propylene glycol						
7.865	7.833	0.032	371184	5.00	5.02	
7 Ethylene glycol						
8.296	8.288	0.008	316571	5.00	4.99	
8 2-(2-Butoxyethoxy)ethanol						
9.524	9.523	0.001	501195	5.00	5.10	
9 2,2'-Oxybisethanol						
10.201	10.200	0.001	331612	5.00	5.10	
10 Triethylene Glycol						
11.182	11.181	0.001	318324	5.00	5.24	
11 Tetraethylene Glycol						
12.864	12.863	0.001	639832	10.0	11.6	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00047

Amount Added: 2.50

Units: uL

SG,GLY,ISTD,00099

Amount Added: 10.00

Units: uL

Run Reagent

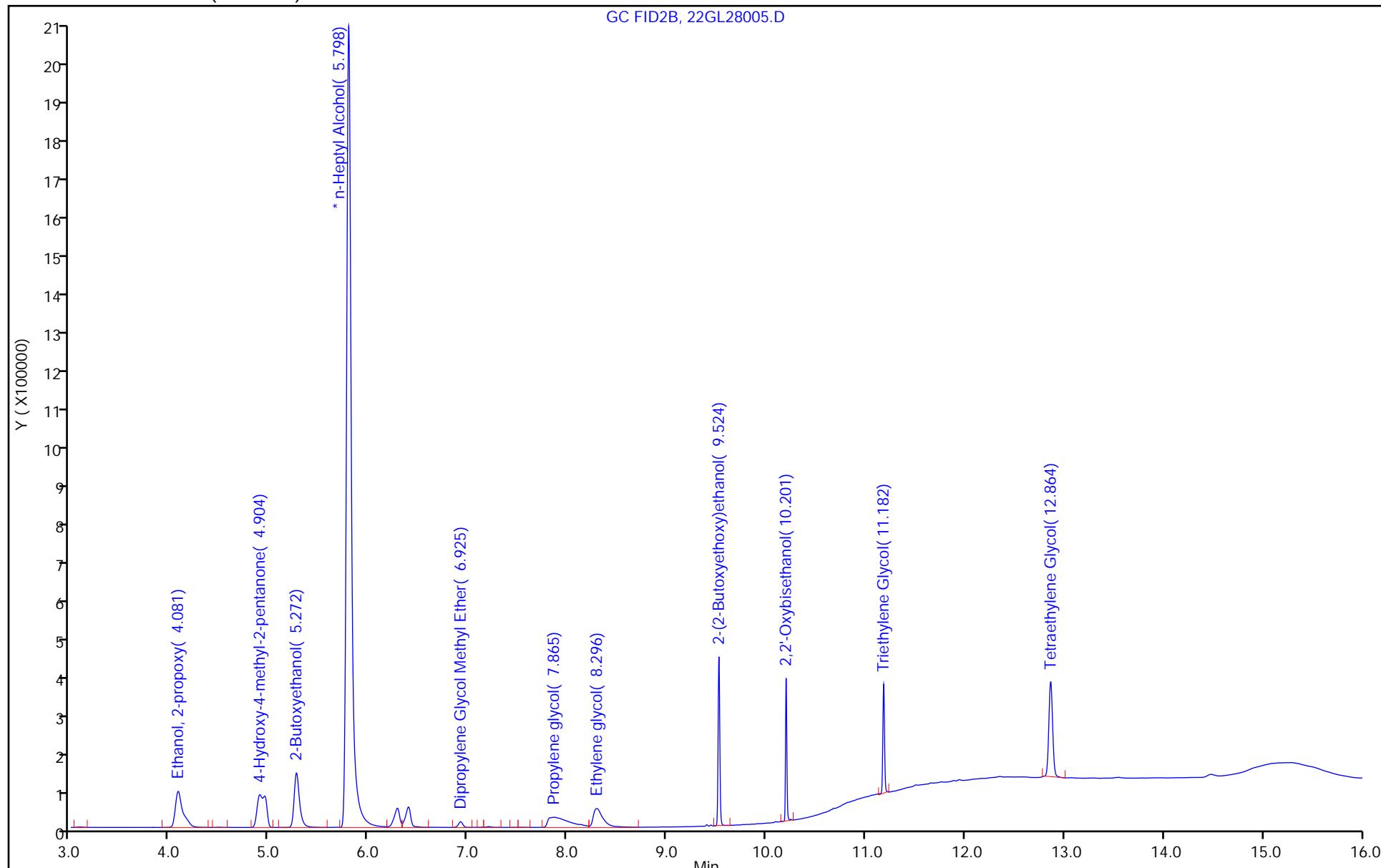
Report Date: 28-Dec-2022 16:16:41

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221228-82994.b\\22GL28005.D
Injection Date: 28-Dec-2022 12:59:34 Instrument ID: CVGG2
Lims ID: ic g1 Operator ID:
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 5
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Worklist Smp#: 5



Eurofins Savannah

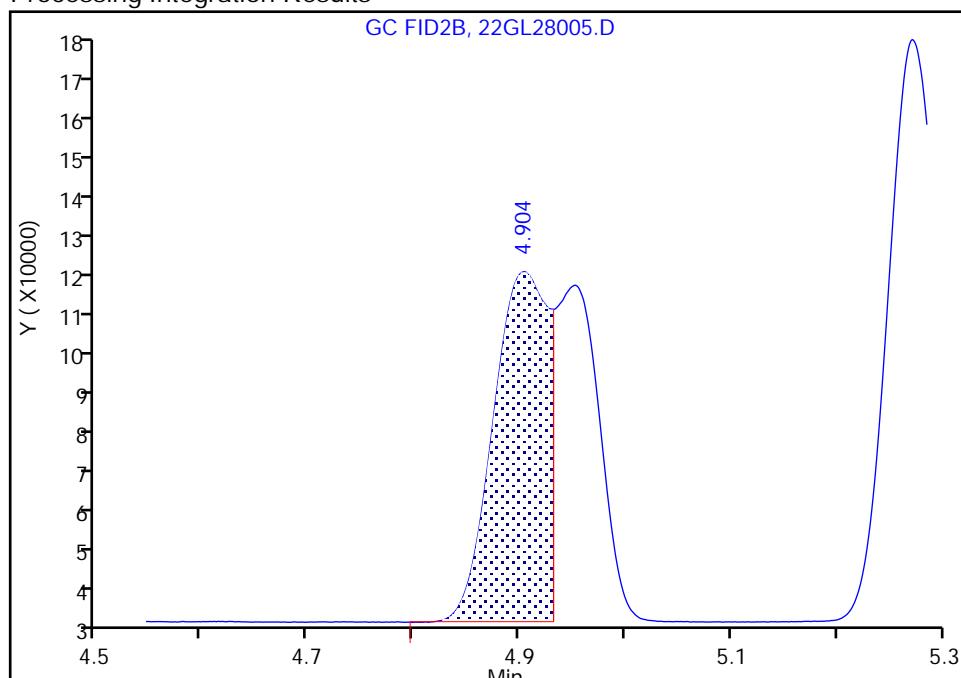
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28005.D
 Injection Date: 28-Dec-2022 12:59:34 Instrument ID: CVGG2
 Lims ID: ic g1
 Client ID:
 Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

2 4-Hydroxy-4-methyl-2-pentanone, CAS: 123-42-2

Signal: 1

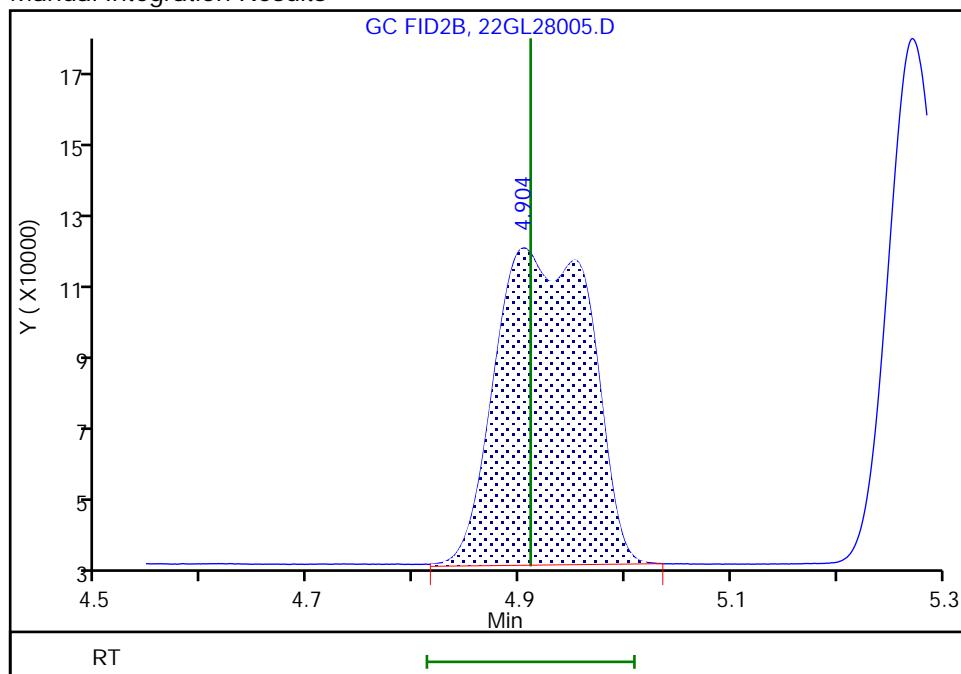
RT: 4.90
 Area: 290595
 Amount: 3.829443
 Amount Units: ug/ml

Processing Integration Results



RT: 4.90
 Area: 512668
 Amount: 5.021635
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 28-Dec-2022 15:01:05

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28006.D
 Lims ID: ic g2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 28-Dec-2022 13:22:05 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0082994-006
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 28-Dec-2022 16:16:42 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1625

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Ethanol, 2-propoxy						
4.082	4.082	0.000	779918	10.0	10.1	
2 4-Hydroxy-4-methyl-2-pentanone						
4.904	4.910	-0.006	842091	10.0	10.2	
3 2-Butoxyethanol						
5.270	5.270	0.000	838827	10.0	10.1	
* 4 n-Heptyl Alcohol						
5.795	5.794	0.001	6287011	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.923	6.921	0.002	71323	10.0	10.2	
6 Propylene glycol						
7.865	7.833	0.032	611714	10.0	10.3	
7 Ethylene glycol						
8.290	8.288	0.002	522652	10.0	10.3	
8 2-(2-Butoxyethoxy)ethanol						
9.524	9.523	0.001	786332	10.0	10.0	
9 2,2'-Oxybisethanol						
10.199	10.200	-0.001	507444	10.0	9.89	
10 Triethylene Glycol						
11.182	11.181	0.001	456985	10.0	9.28	
11 Tetraethylene Glycol						
12.864	12.863	0.001	915062	20.0	19.4	

Reagents:

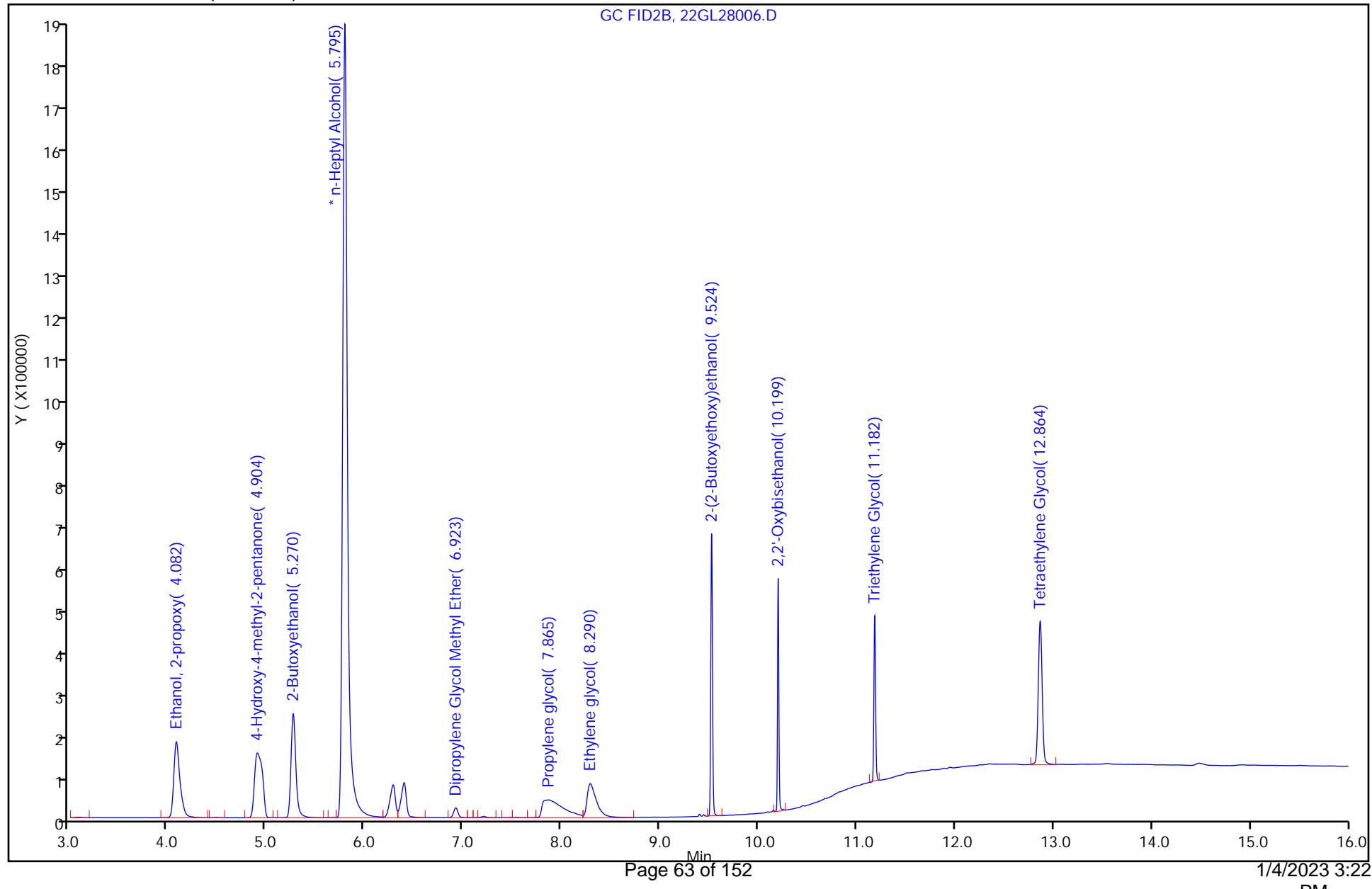
SG_Gly_CAL_00047	Amount Added: 5.00	Units: uL	
SG,GLY,ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent

Report Date: 28-Dec-2022 16:16:42

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah
Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221228-82994.b\\22GL28006.D
Injection Date: 28-Dec-2022 13:22:05 Instrument ID: CVGG2
Lims ID: ic g2
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Operator ID:
Worklist Smp#: 6



Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28007.D
 Lims ID: icis g3
 Client ID:
 Sample Type: ICIS Calib Level: 3
 Inject. Date: 28-Dec-2022 13:44:44 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0082994-007
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 28-Dec-2022 16:16:43 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1625

First Level Reviewer: SK9U Date: 28-Dec-2022 15:01:42

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy						
4.082	4.082	0.000	1700251	20.0	18.8	
2 4-Hydroxy-4-methyl-2-pentanone						
4.910	4.910	0.000	1840594	20.0	19.0	
3 2-Butoxyethanol						
5.270	5.270	0.000	1827057	20.0	18.7	
* 4 n-Heptyl Alcohol						
5.794	5.794	0.000	7896964	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.921	6.921	0.000	150630	20.0	18.3	
6 Propylene glycol					M	
7.833	7.833	0.000	1303224	20.0	18.6	M
7 Ethylene glycol					M	
8.288	8.288	0.000	1120872	20.0	18.9	M
8 2-(2-Butoxyethoxy)ethanol						
9.523	9.523	0.000	1669648	20.0	18.3	
9 2,2'-Oxybisethanol						
10.200	10.200	0.000	1101381	20.0	18.8	
10 Triethylene Glycol						
11.181	11.181	0.000	1052326	20.0	18.8	
11 Tetraethylene Glycol						
12.863	12.863	0.000	2013966	40.0	36.2	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00047

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00099

Amount Added: 10.00

Units: uL

Run Reagent

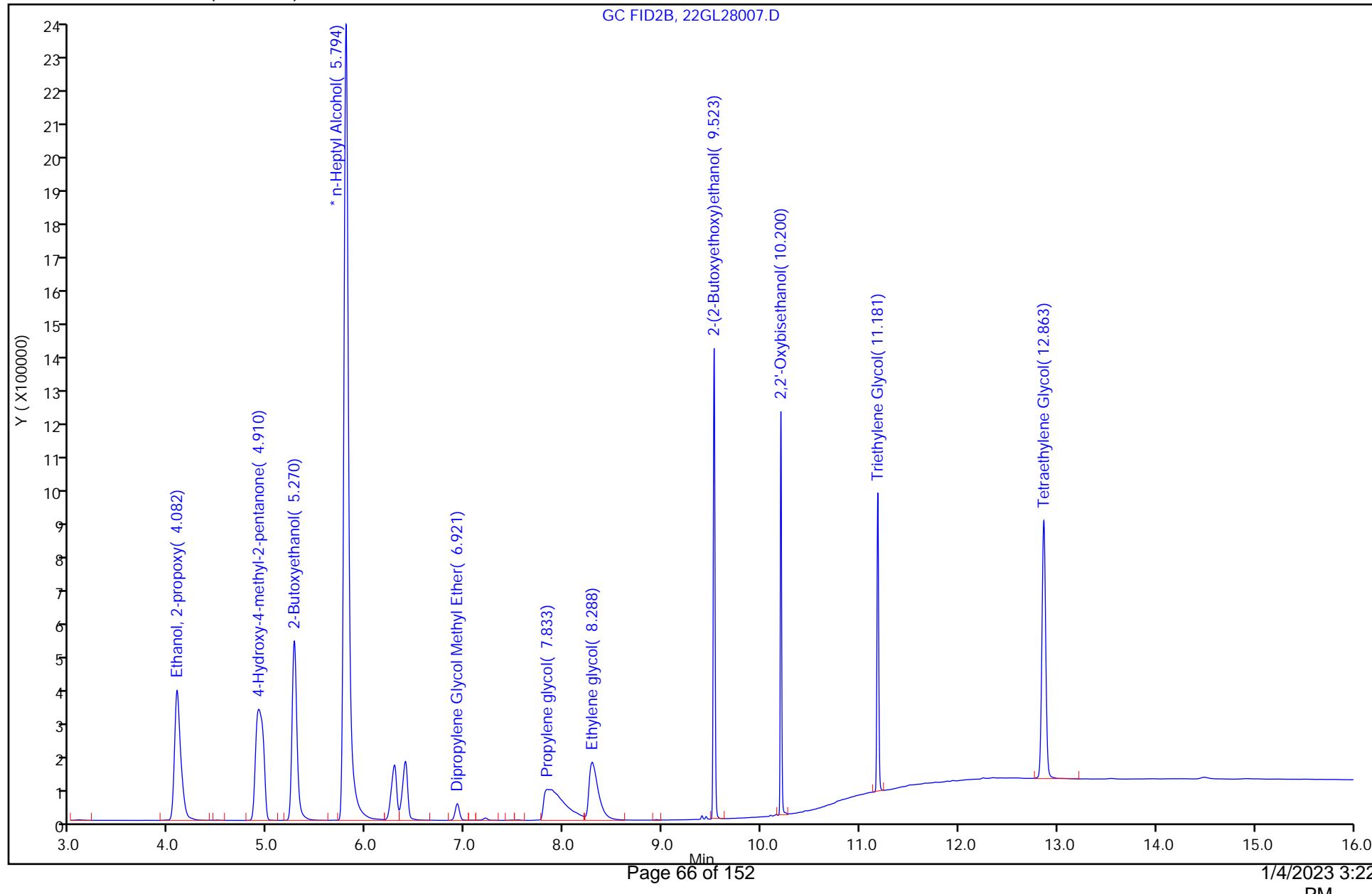
Report Date: 28-Dec-2022 16:16:43

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221228-82994.b\\22GL28007.D
Injection Date: 28-Dec-2022 13:44:44 Instrument ID: CVGG2
Lims ID: icis g3 Operator ID:
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 7
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Worklist Smp#: 7



Eurofins Savannah

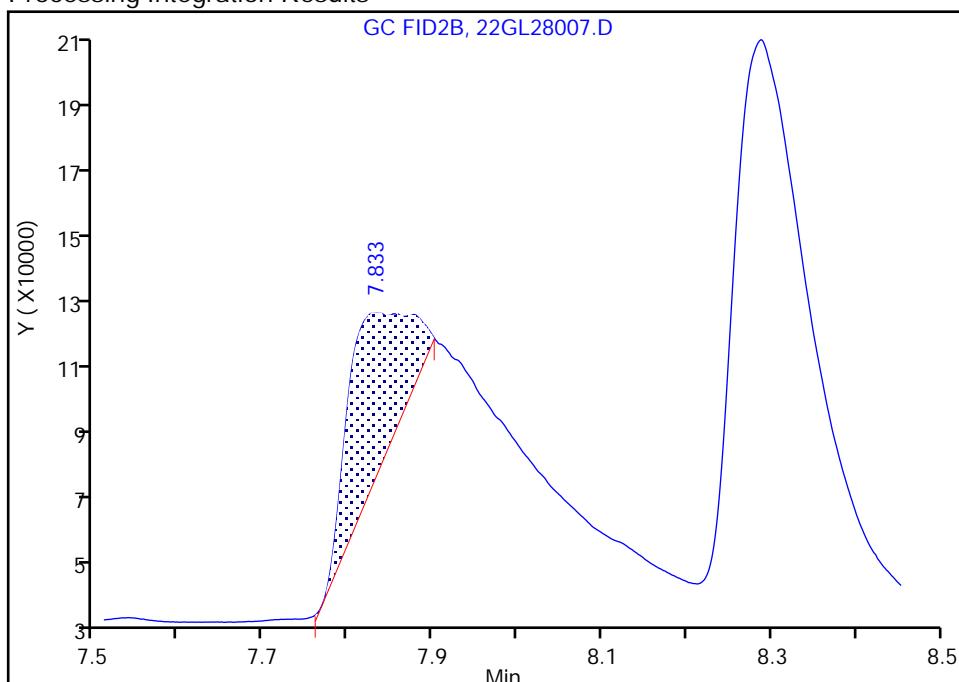
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28007.D
 Injection Date: 28-Dec-2022 13:44:44 Instrument ID: CVGG2
 Lims ID: icis g3
 Client ID:
 Operator ID: ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

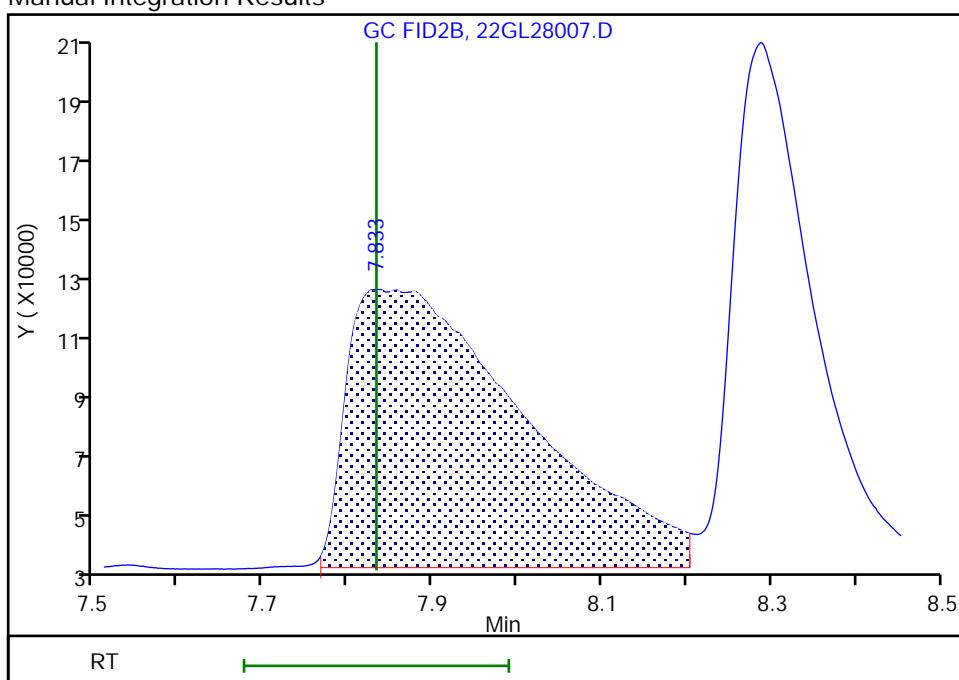
RT: 7.83
 Area: 236271
 Amount: 3.982779
 Amount Units: ug/ml

Processing Integration Results



Manual Integration Results

RT: 7.83
 Area: 1303224
 Amount: 18.589721
 Amount Units: ug/ml



Reviewer: SK9U, 28-Dec-2022 15:01:39

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Savannah

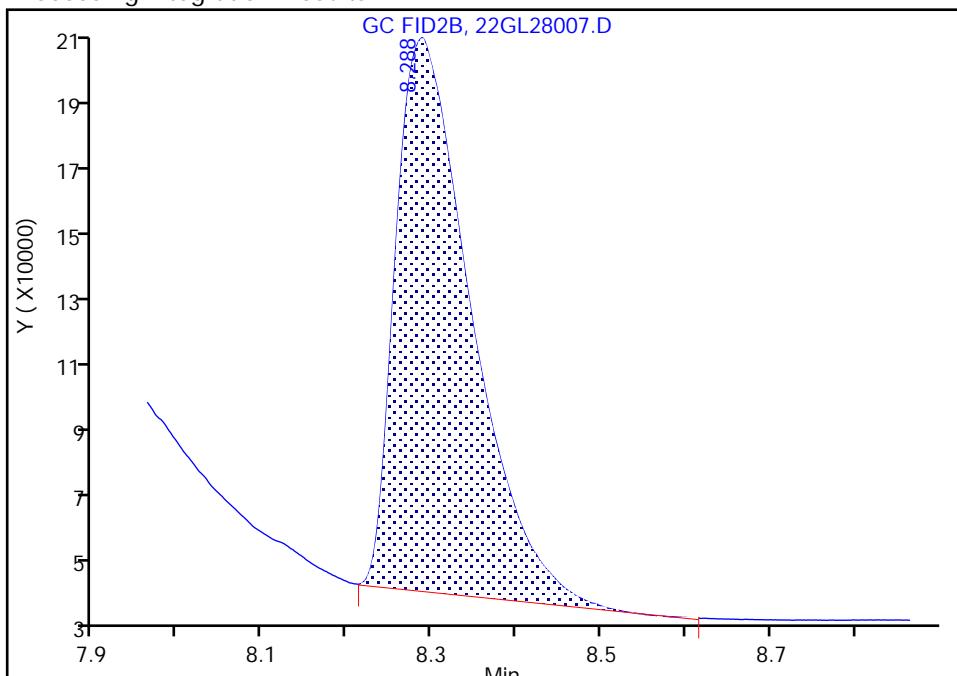
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28007.D
 Injection Date: 28-Dec-2022 13:44:44 Instrument ID: CVGG2
 Lims ID: icis g3
 Client ID:
 Operator ID: ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

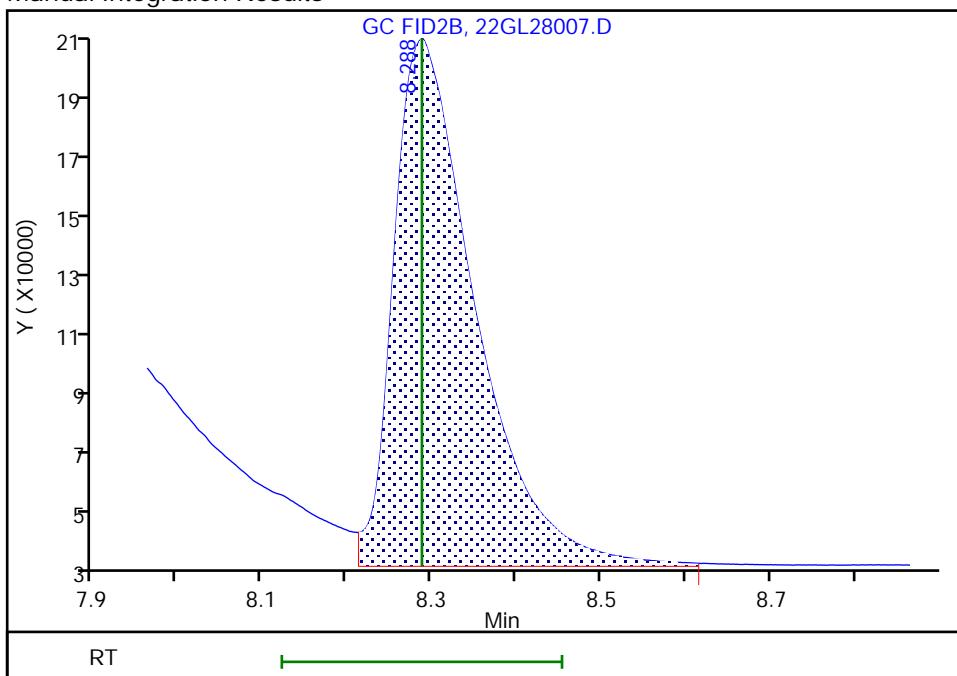
RT: 8.29
 Area: 996645
 Amount: 17.018923
 Amount Units: ug/ml

Processing Integration Results



RT: 8.29
 Area: 1120872
 Amount: 18.882739
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 28-Dec-2022 15:01:39

Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28008.D
 Lims ID: ic g4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 28-Dec-2022 14:07:18 ALS Bottle#: 8 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0082994-008
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 28-Dec-2022 16:16:44 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1625

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Ethanol, 2-propoxy						
4.069	4.069	0.000	3587750	50.0	49.2	
2 4-Hydroxy-4-methyl-2-pentanone						
4.893	4.893	0.000	3816878	50.0	48.9	
3 2-Butoxyethanol						
5.262	5.262	0.000	3854091	50.0	49.2	
* 4 n-Heptyl Alcohol						
5.792	5.792	0.000	6686553	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.913	6.913	0.000	323400	50.0	48.9	
6 Propylene glycol						
7.842	7.842	0.000	2759835	50.0	49.1	
7 Ethylene glycol						
8.277	8.277	0.000	2360006	50.0	49.7	
8 2-(2-Butoxyethoxy)ethanol						
9.522	9.522	0.000	3554683	50.0	49.0	
9 2,2'-Oxybisethanol						
10.199	10.199	0.000	2287951	50.0	49.4	
10 Triethylene Glycol						
11.181	11.181	0.000	2183035	50.0	49.1	
11 Tetraethylene Glycol						
12.862	12.862	0.000	4188469	100.0	93.2	

Reagents:

SG_Gly_CAL_00047	Amount Added: 25.00	Units: uL	
SG,GLY,ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent

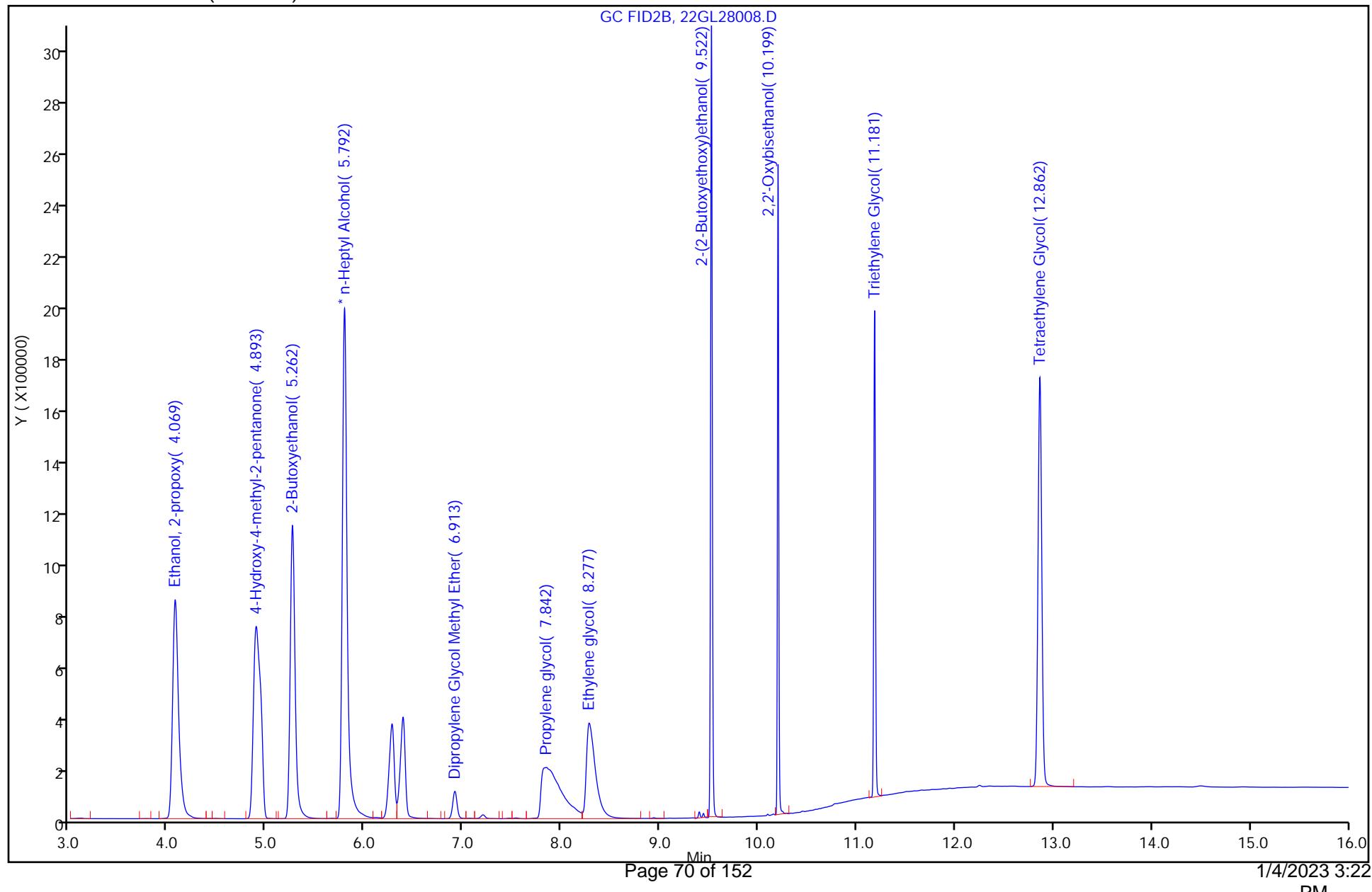
Report Date: 28-Dec-2022 16:16:45

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221228-82994.b\\22GL28008.D
Injection Date: 28-Dec-2022 14:07:18 Instrument ID: CVGG2
Lims ID: ic g4 Operator ID:
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 8
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Worklist Smp#: 8



Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28009.D
 Lims ID: ic g5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 28-Dec-2022 14:29:53 ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0082994-009
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 28-Dec-2022 16:16:46 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1625

First Level Reviewer: SK9U Date: 28-Dec-2022 15:04:28

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Ethanol, 2-propoxy						
4.067	4.069	-0.002	5954336	80.0	76.3	
2 4-Hydroxy-4-methyl-2-pentanone						
4.892	4.893	-0.001	6369012	80.0	76.2	
3 2-Butoxyethanol						
5.260	5.262	-0.002	6405487	80.0	76.3	
* 4 n-Heptyl Alcohol						
5.789	5.792	-0.003	7244681	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.914	6.913	0.001	543106	80.0	76.7	
6 Propylene glycol					M	
7.844	7.842	0.002	4628229	80.0	76.9	M
7 Ethylene glycol					M	
8.282	8.277	0.005	3896125	80.0	76.7	M
8 2-(2-Butoxyethoxy)ethanol						
9.522	9.522	0.000	5956132	80.0	76.9	
9 2,2'-Oxybisethanol						
10.200	10.199	0.001	3813604	80.0	77.2	
10 Triethylene Glycol						
11.181	11.181	0.000	3682443	80.0	77.7	
11 Tetraethylene Glycol						
12.864	12.862	0.002	7258799	160.0	150.8	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00047

Amount Added: 40.00

Units: uL

SG,GLY,ISTD,00099

Amount Added: 10.00

Units: uL

Run Reagent

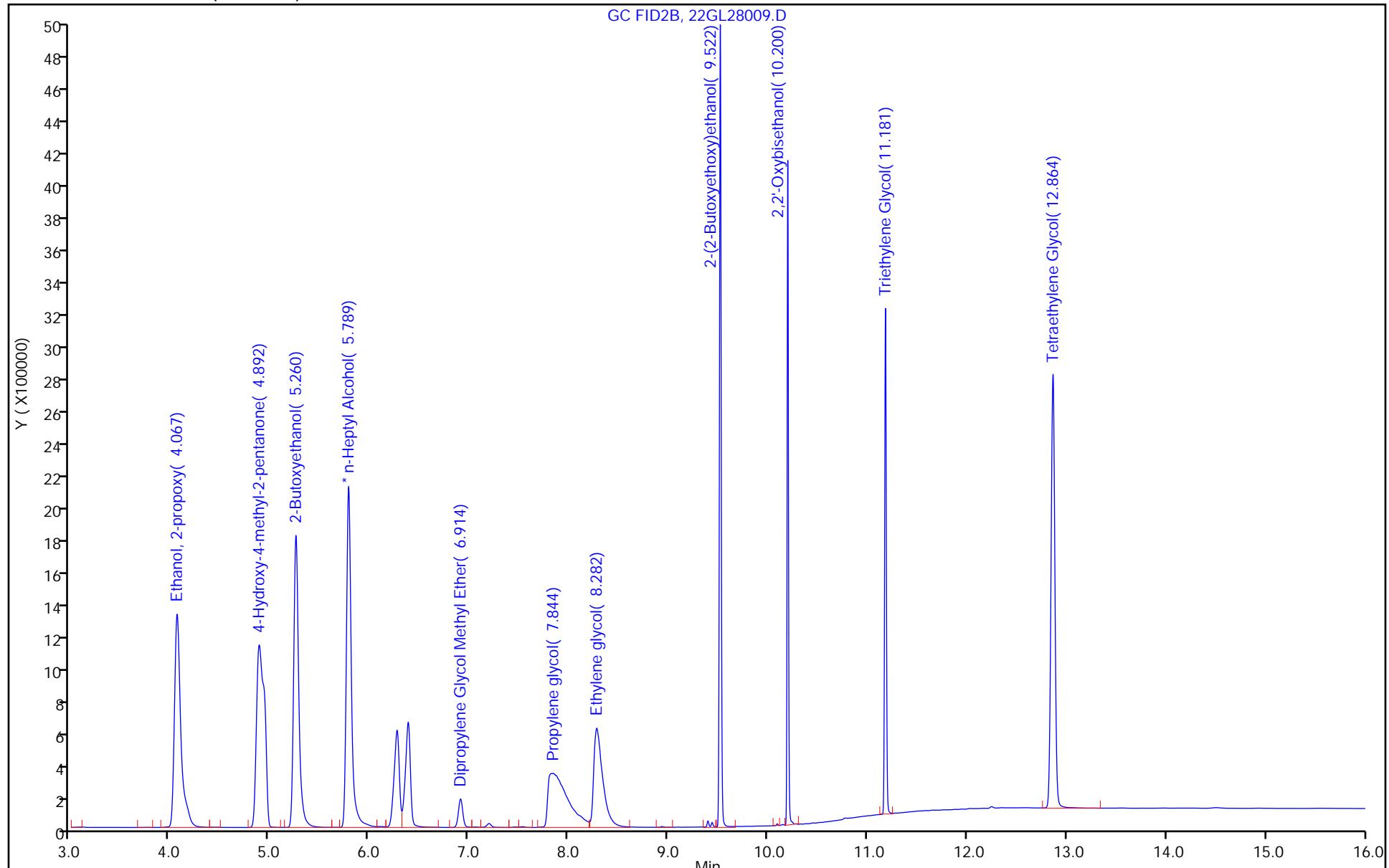
Report Date: 28-Dec-2022 16:16:46

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221228-82994.b\\22GL28009.D
Injection Date: 28-Dec-2022 14:29:53 Instrument ID: CVGG2
Lims ID: ic g5 Operator ID:
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 9
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Worklist Smp#: 9



Eurofins Savannah

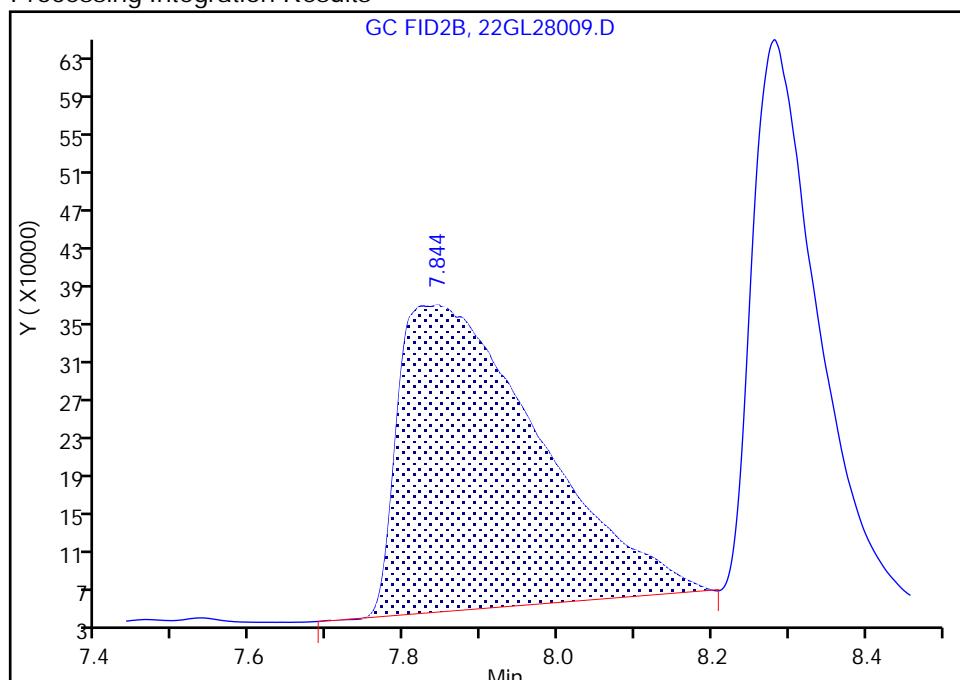
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28009.D
 Injection Date: 28-Dec-2022 14:29:53 Instrument ID: CVGG2
 Lims ID: ic g5
 Client ID:
 Operator ID: ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

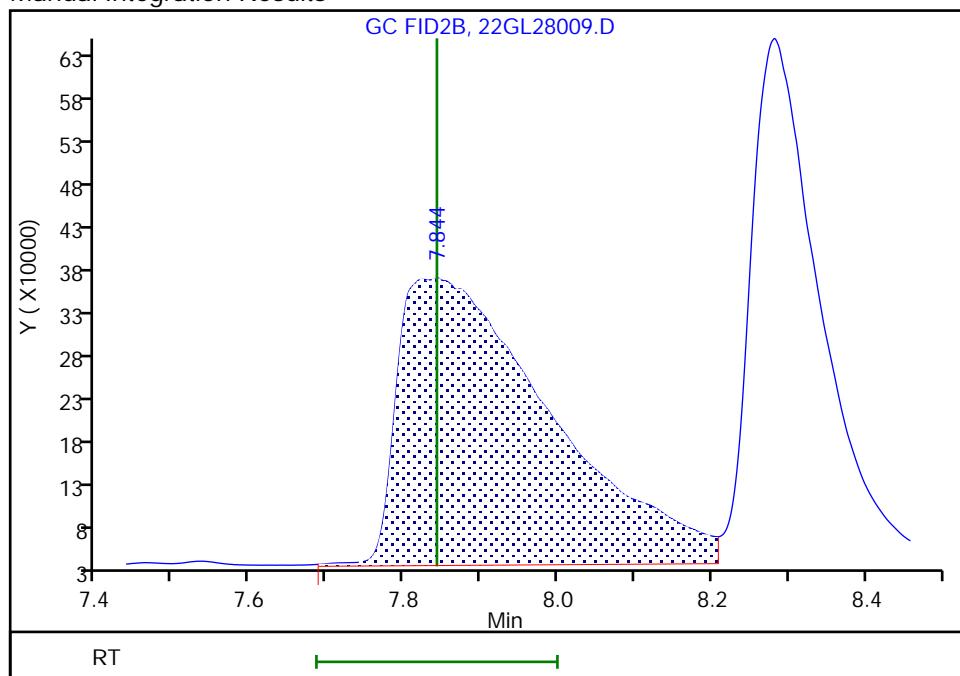
RT: 7.84
 Area: 4124229
 Amount: 64.228979
 Amount Units: ug/ml

Processing Integration Results



RT: 7.84
 Area: 4628229
 Amount: 76.921335
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 28-Dec-2022 15:02:10

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

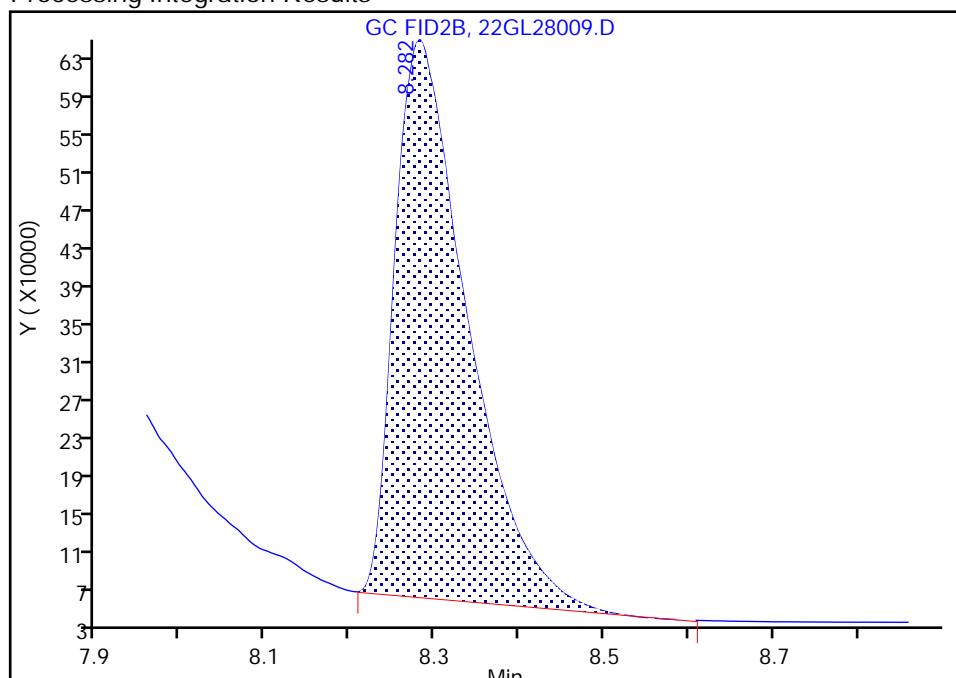
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28009.D
 Injection Date: 28-Dec-2022 14:29:53 Instrument ID: CVGG2
 Lims ID: ic g5
 Client ID:
 Operator ID: ALS Bottle#: 9 Worklist Smp#: 9
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

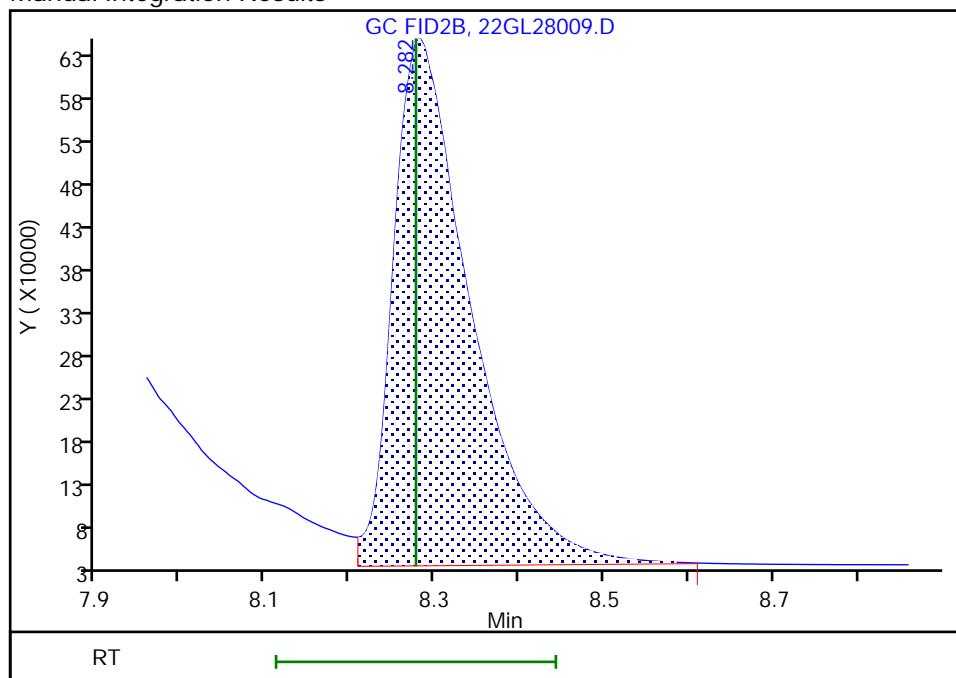
RT: 8.28
 Area: 3503380
 Amount: 63.856229
 Amount Units: ug/ml

Processing Integration Results



RT: 8.28
 Area: 3896125
 Amount: 76.652966
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 28-Dec-2022 15:02:10

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Lims ID: ic g6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 28-Dec-2022 14:52:34 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0082994-010
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 28-Dec-2022 16:16:47 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1625

First Level Reviewer: SK9U Date: 28-Dec-2022 16:13:19

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Ethanol, 2-propoxy						
4.071	4.069	0.002	8435958	100.0	110.1	
2 4-Hydroxy-4-methyl-2-pentanone						
4.892	4.893	-0.001	9031131	100.0	110.0	
3 2-Butoxyethanol						
5.263	5.262	0.001	9118479	100.0	110.6	
* 4 n-Heptyl Alcohol						
5.791	5.792	-0.001	7160236	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.912	6.913	-0.001	777900	100.0	112.0	
6 Propylene glycol					M	
7.825	7.842	-0.017	6484980	100.0	109.8	M
7 Ethylene glycol					M	
8.279	8.277	0.002	5367464	100.0	107.6	M
8 2-(2-Butoxyethoxy)ethanol						
9.521	9.522	-0.001	8529204	100.0	112.4	
9 2,2'-Oxybisethanol						
10.200	10.199	0.001	5336159	100.0	110.2	
10 Triethylene Glycol						
11.180	11.181	-0.001	5248662	100.0	113.0	
11 Tetraethylene Glycol						
12.862	12.862	0.000	10347057	200.0	218.8	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00047

Amount Added: 50.00

Units: uL

SG,GLY,ISTD,00099

Amount Added: 10.00

Units: uL

Run Reagent

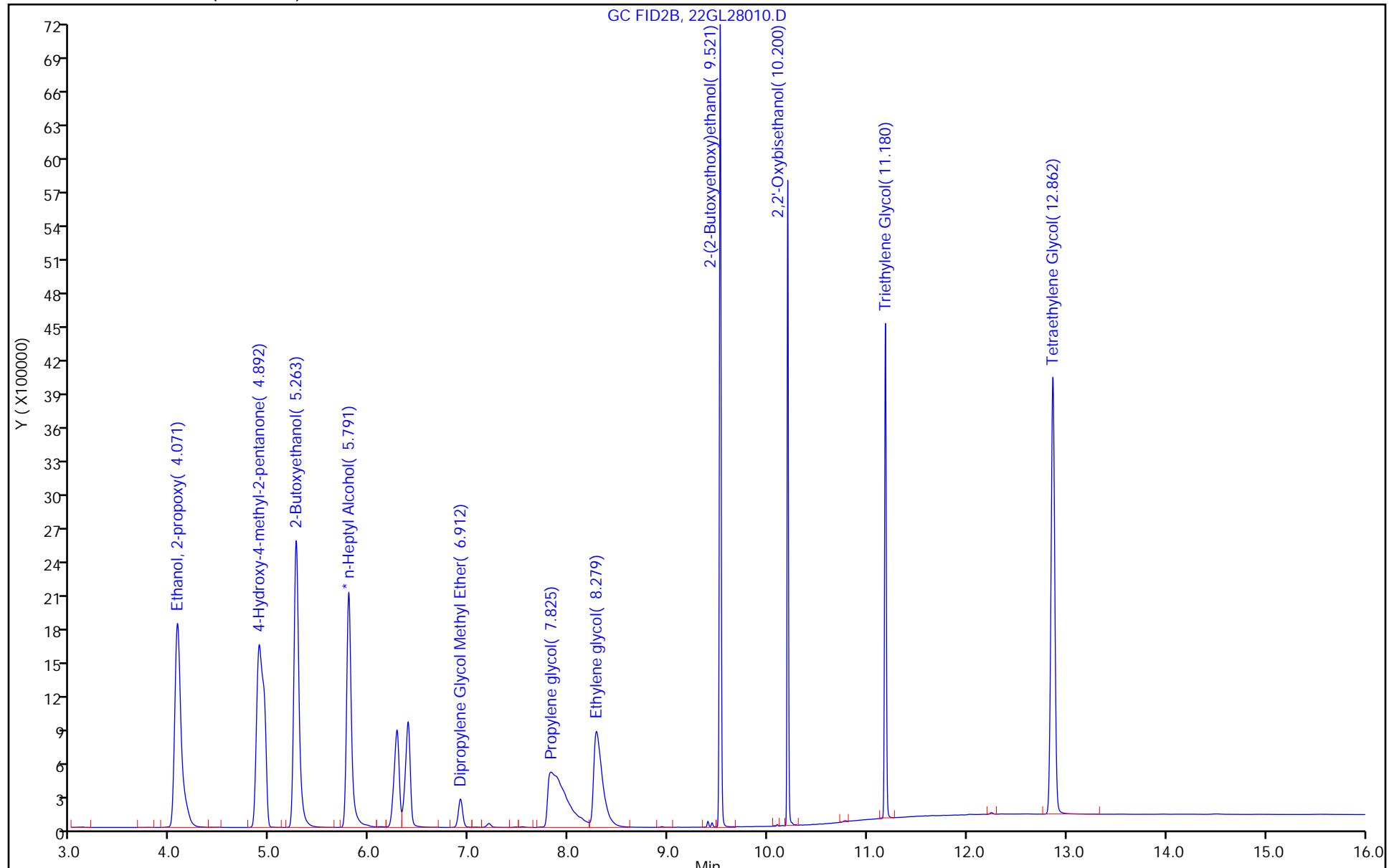
Report Date: 28-Dec-2022 16:16:47

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221228-82994.b\\22GL28010.D
Injection Date: 28-Dec-2022 14:52:34 Instrument ID: CVGG2
Lims ID: ic g6 Operator ID:
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 10
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Worklist Smp#: 10



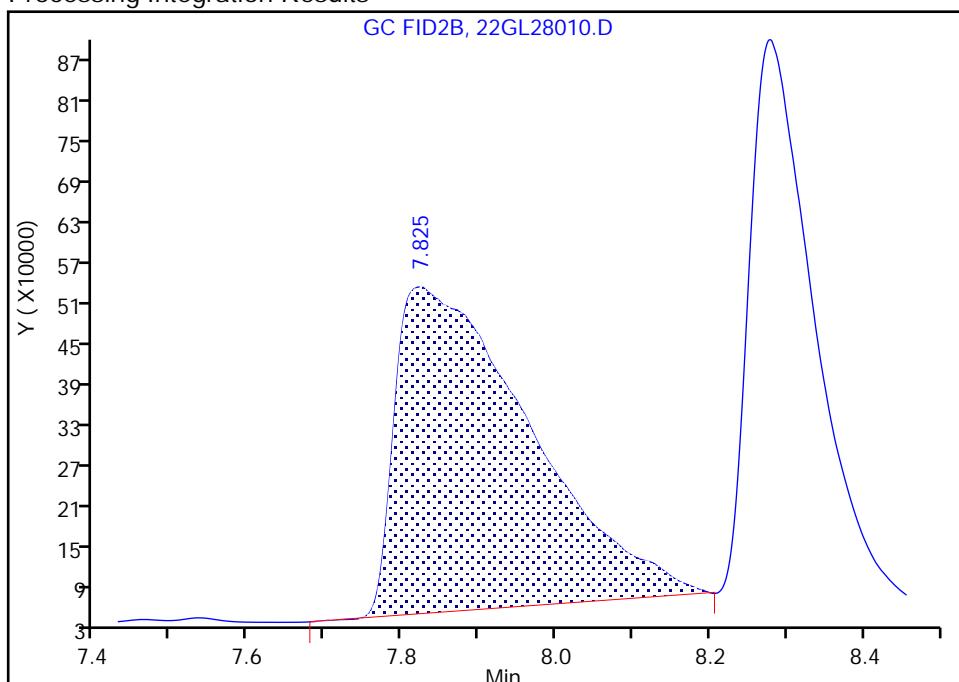
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 Injection Date: 28-Dec-2022 14:52:34 Instrument ID: CVGG2
 Lims ID: ic g6
 Client ID:
 Operator ID: ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

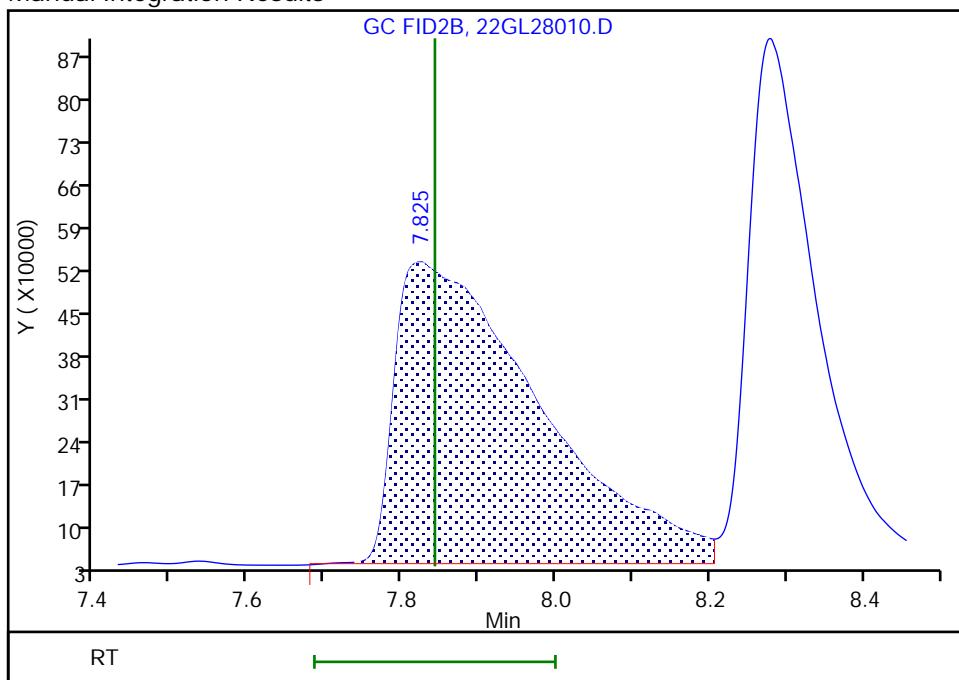
RT: 7.82
 Area: 5835473
 Amount: 91.681669
 Amount Units: ug/ml

Processing Integration Results



RT: 7.82
 Area: 6484980
 Amount: 109.7731
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 28-Dec-2022 16:13:14

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

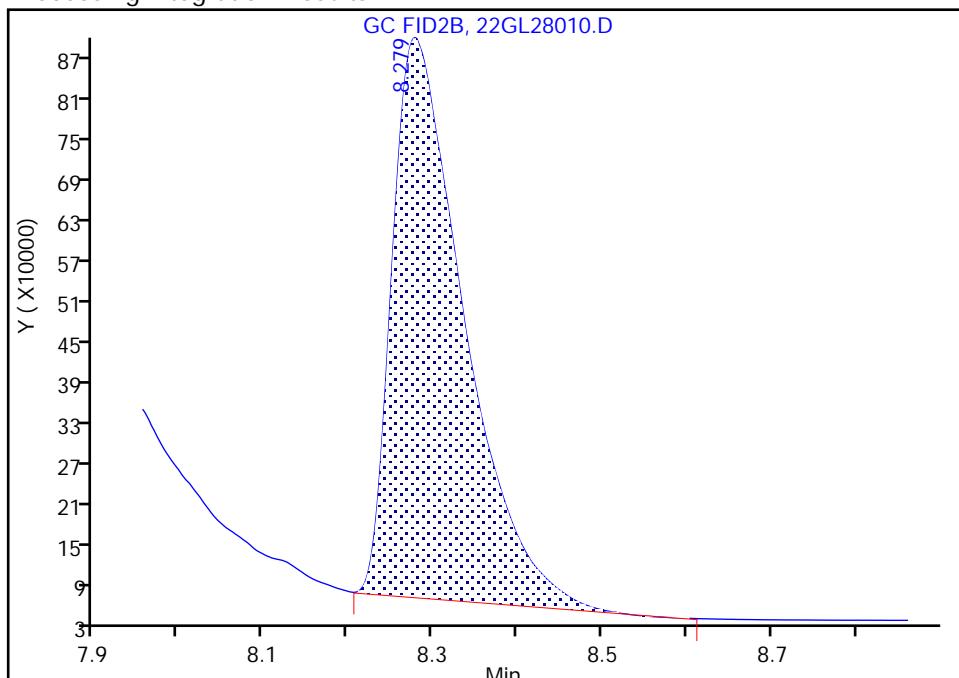
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Injection Date: 28-Dec-2022 14:52:34 Instrument ID: CVGG2
 Lims ID: ic g6
 Client ID:
 Operator ID: ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

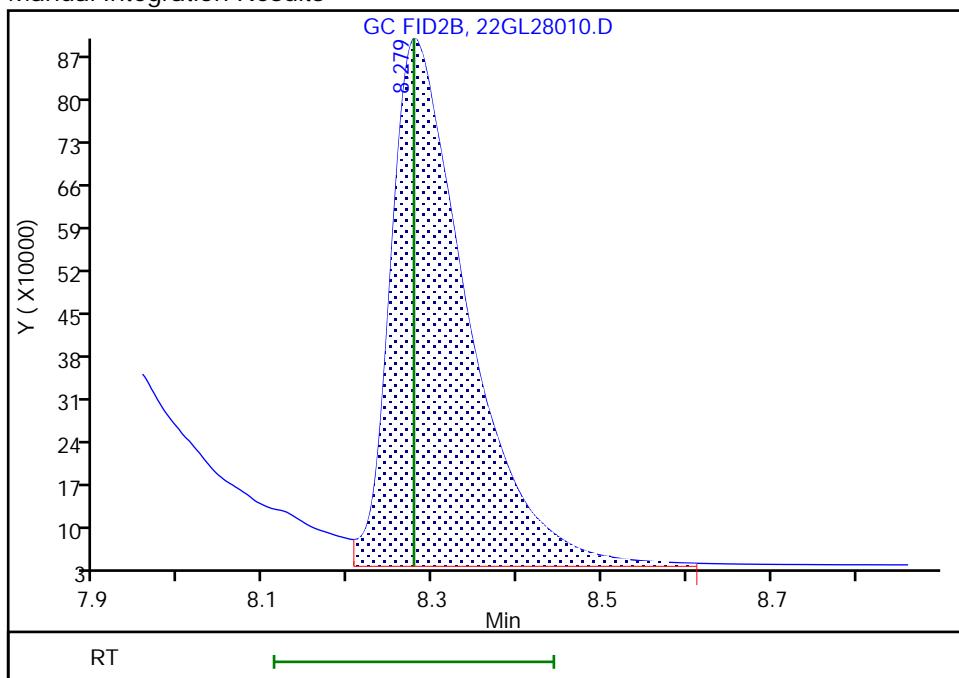
RT: 8.28
 Area: 4857441
 Amount: 89.801056
 Amount Units: ug/ml

Processing Integration Results



RT: 8.28
 Area: 5367464
 Amount: 107.5671
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 28-Dec-2022 16:13:14

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

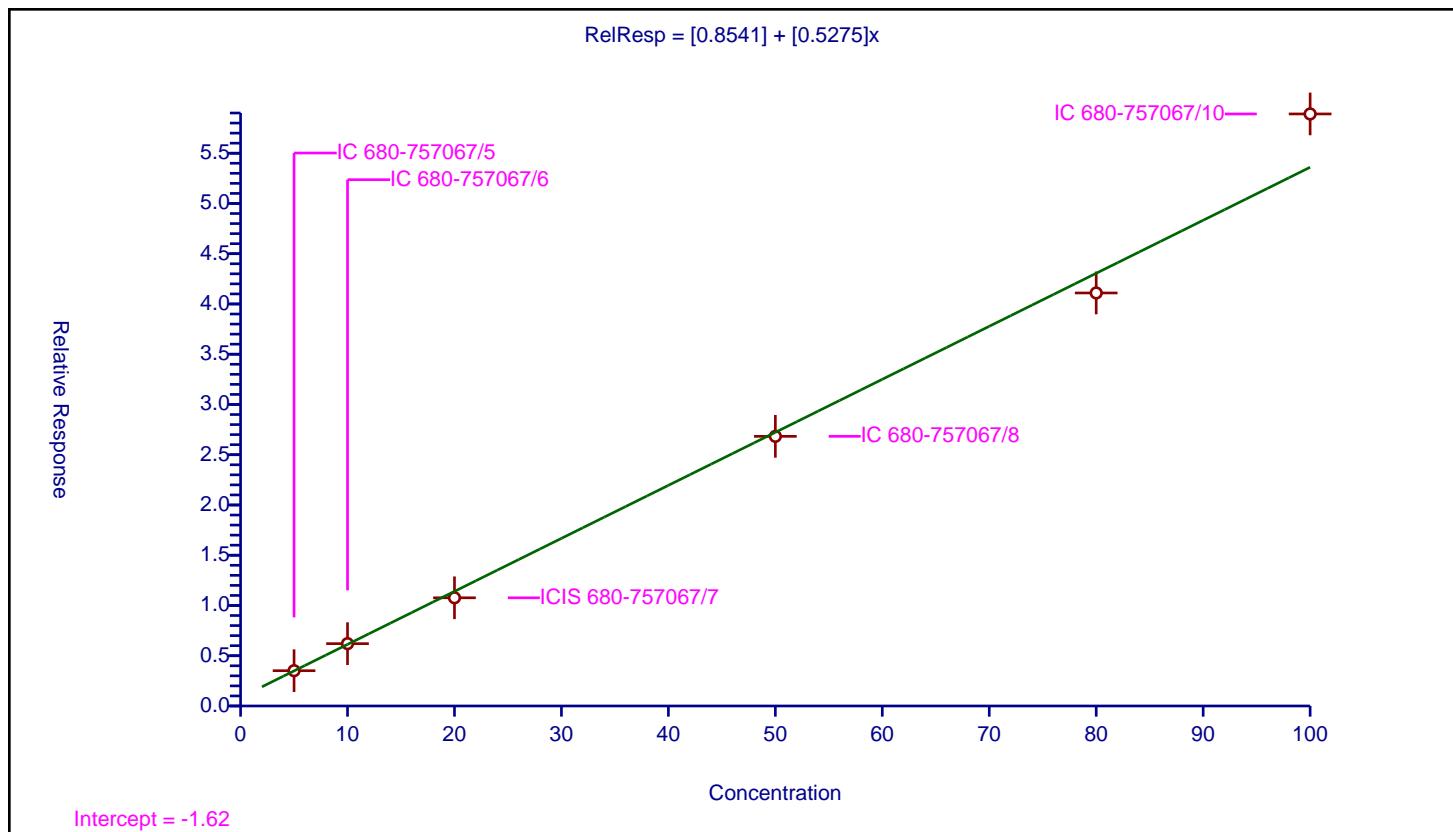
Calibration

/ Ethanol, 2-propoxy

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0.8541
Slope:	0.5275
Error Coefficients	
Standard Error:	5550000
Relative Standard Error:	6.4
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-757067/5	5.0	3.511404	50.0	6770882.0	0.702281	Y
2	IC 680-757067/6	10.0	6.202614	50.0	6287011.0	0.620261	Y
3	ICIS 680-757067/7	20.0	10.765219	50.0	7896964.0	0.538261	Y
4	IC 680-757067/8	50.0	26.828098	50.0	6686553.0	0.536562	Y
5	IC 680-757067/9	80.0	41.094535	50.0	7244681.0	0.513682	Y
6	IC 680-757067/10	100.0	58.90838	50.0	7160236.0	0.589084	Y



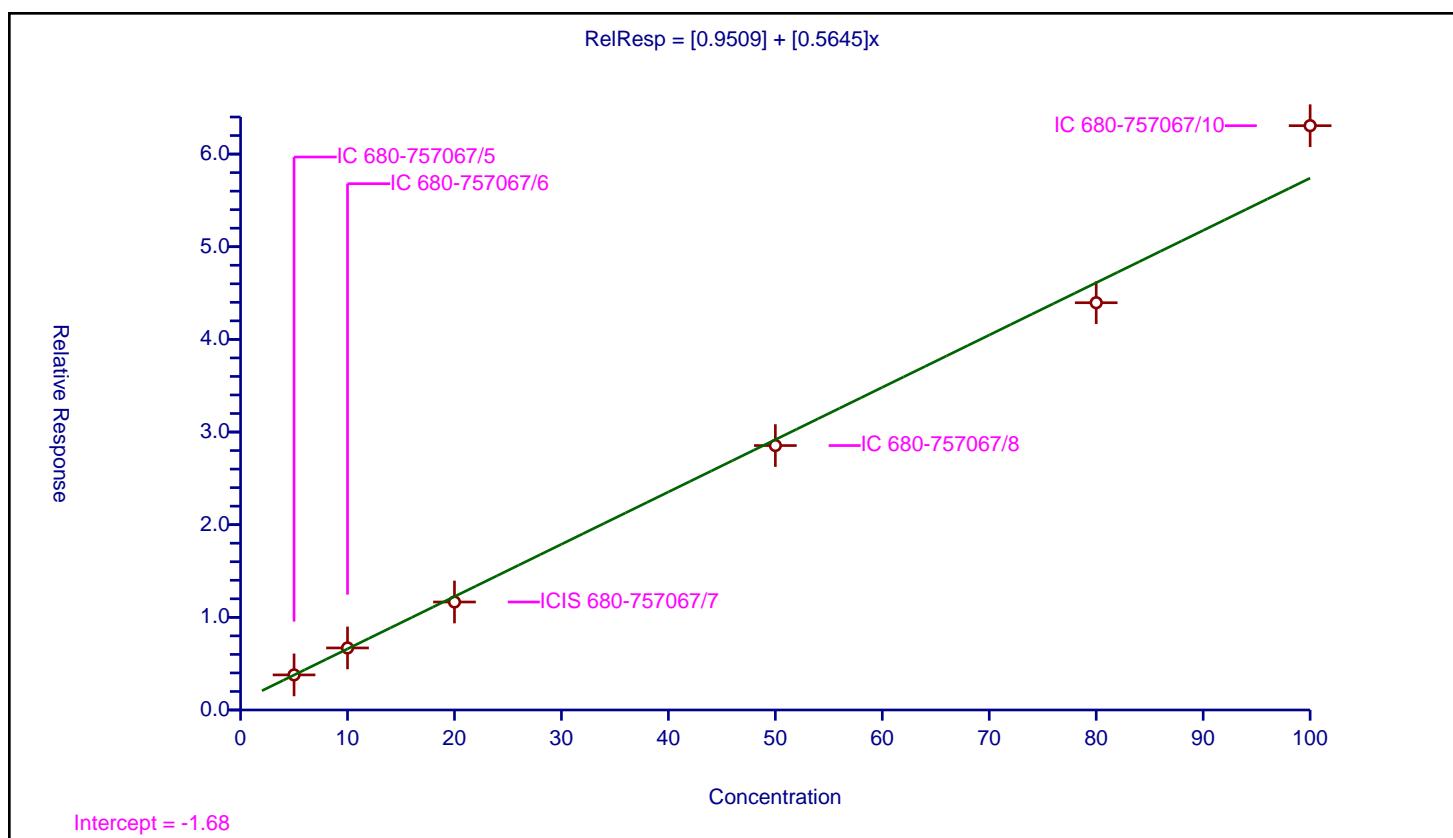
Calibration

/ 4-Hydroxy-4-methyl-2-pentanone

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0.9509
Slope:	0.5645
Error Coefficients	
Standard Error:	5940000
Relative Standard Error:	6.3
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-757067/5	5.0	3.785829	50.0	6770882.0	0.757166	Y
2	IC 680-757067/6	10.0	6.69707	50.0	6287011.0	0.669707	Y
3	ICIS 680-757067/7	20.0	11.653808	50.0	7896964.0	0.58269	Y
4	IC 680-757067/8	50.0	28.541447	50.0	6686553.0	0.570829	Y
5	IC 680-757067/9	80.0	43.95647	50.0	7244681.0	0.549456	Y
6	IC 680-757067/10	100.0	63.064479	50.0	7160236.0	0.630645	Y



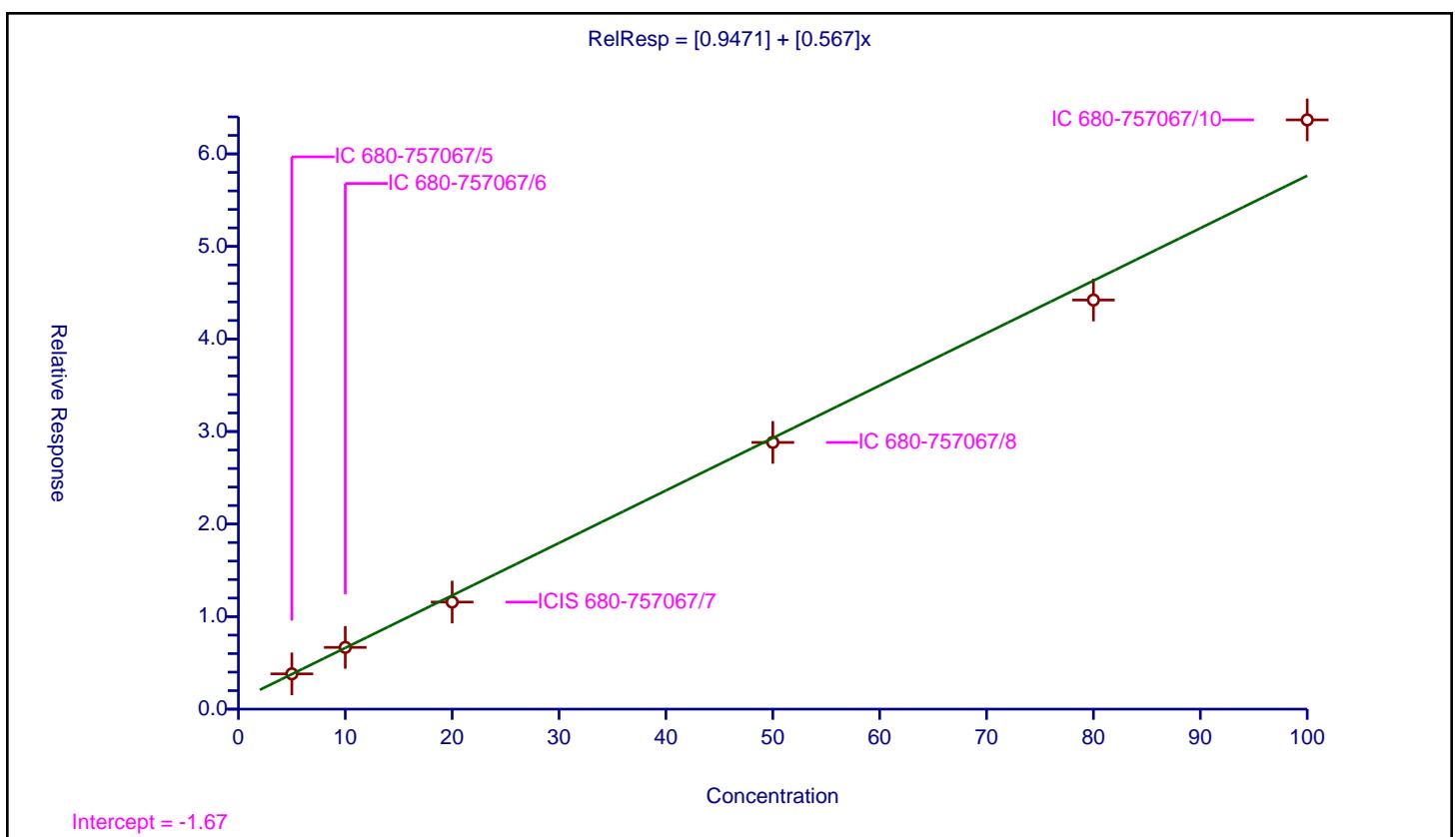
Calibration

/ 2-Butoxyethanol

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0.9471
Slope:	0.567
Error Coefficients	
Standard Error:	5990000
Relative Standard Error:	6.7
Correlation Coefficient:	0.988
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-757067/5	5.0	3.810951	50.0	6770882.0	0.76219	Y
2	IC 680-757067/6	10.0	6.671111	50.0	6287011.0	0.667111	Y
3	ICIS 680-757067/7	20.0	11.568098	50.0	7896964.0	0.578405	Y
4	IC 680-757067/8	50.0	28.819715	50.0	6686553.0	0.576394	Y
5	IC 680-757067/9	80.0	44.208206	50.0	7244681.0	0.552603	Y
6	IC 680-757067/10	100.0	63.674431	50.0	7160236.0	0.636744	Y



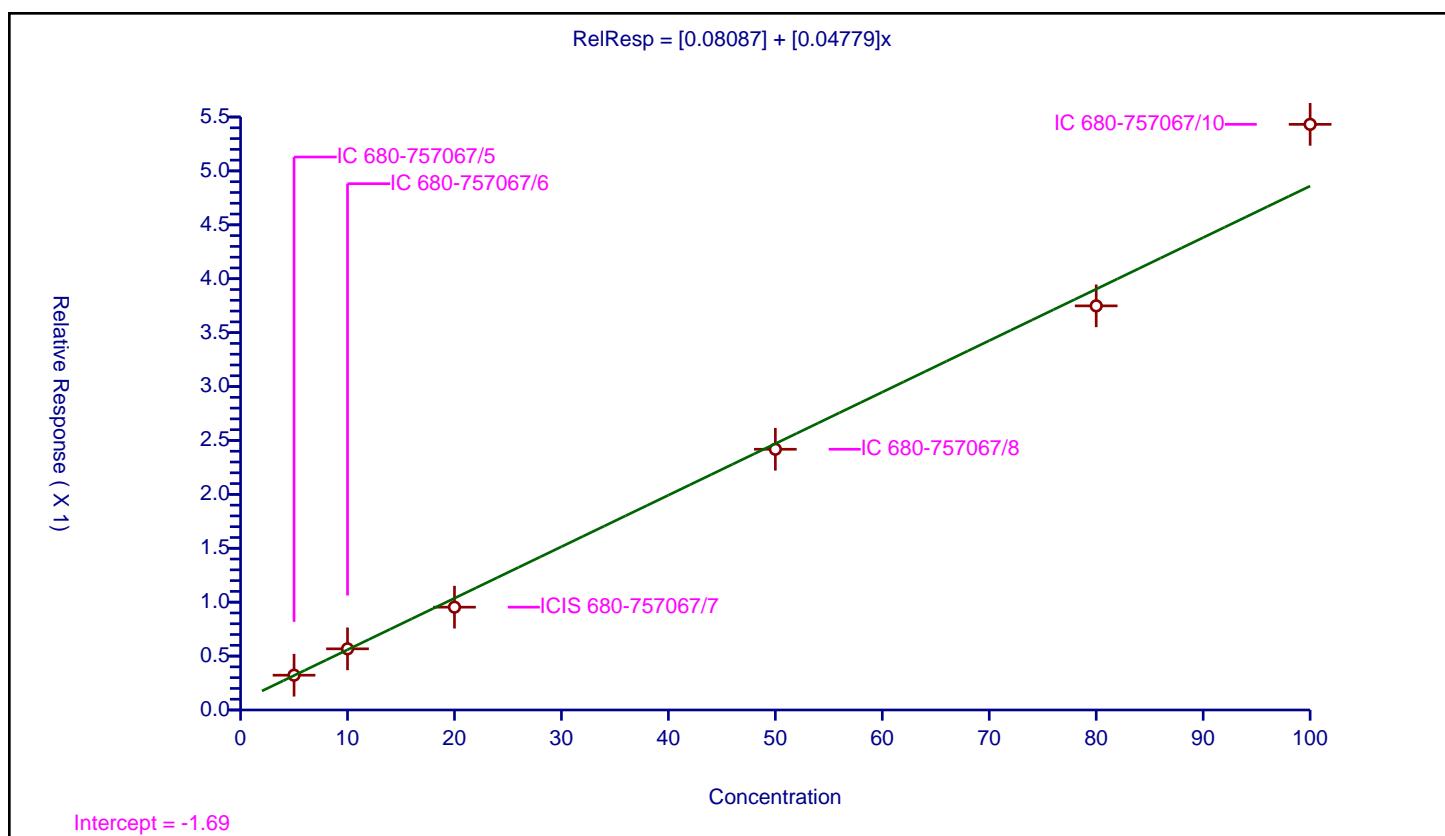
Calibration

/ Dipropylene Glycol Methyl Ether

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0.08087
Slope:	0.04779
Error Coefficients	
Standard Error:	509000
Relative Standard Error:	7.8
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-757067/5	5.0	0.322558	50.0	6770882.0	0.064512	Y
2	IC 680-757067/6	10.0	0.567225	50.0	6287011.0	0.056723	Y
3	ICIS 680-757067/7	20.0	0.953721	50.0	7896964.0	0.047686	Y
4	IC 680-757067/8	50.0	2.418286	50.0	6686553.0	0.048366	Y
5	IC 680-757067/9	80.0	3.748309	50.0	7244681.0	0.046854	Y
6	IC 680-757067/10	100.0	5.432084	50.0	7160236.0	0.054321	Y



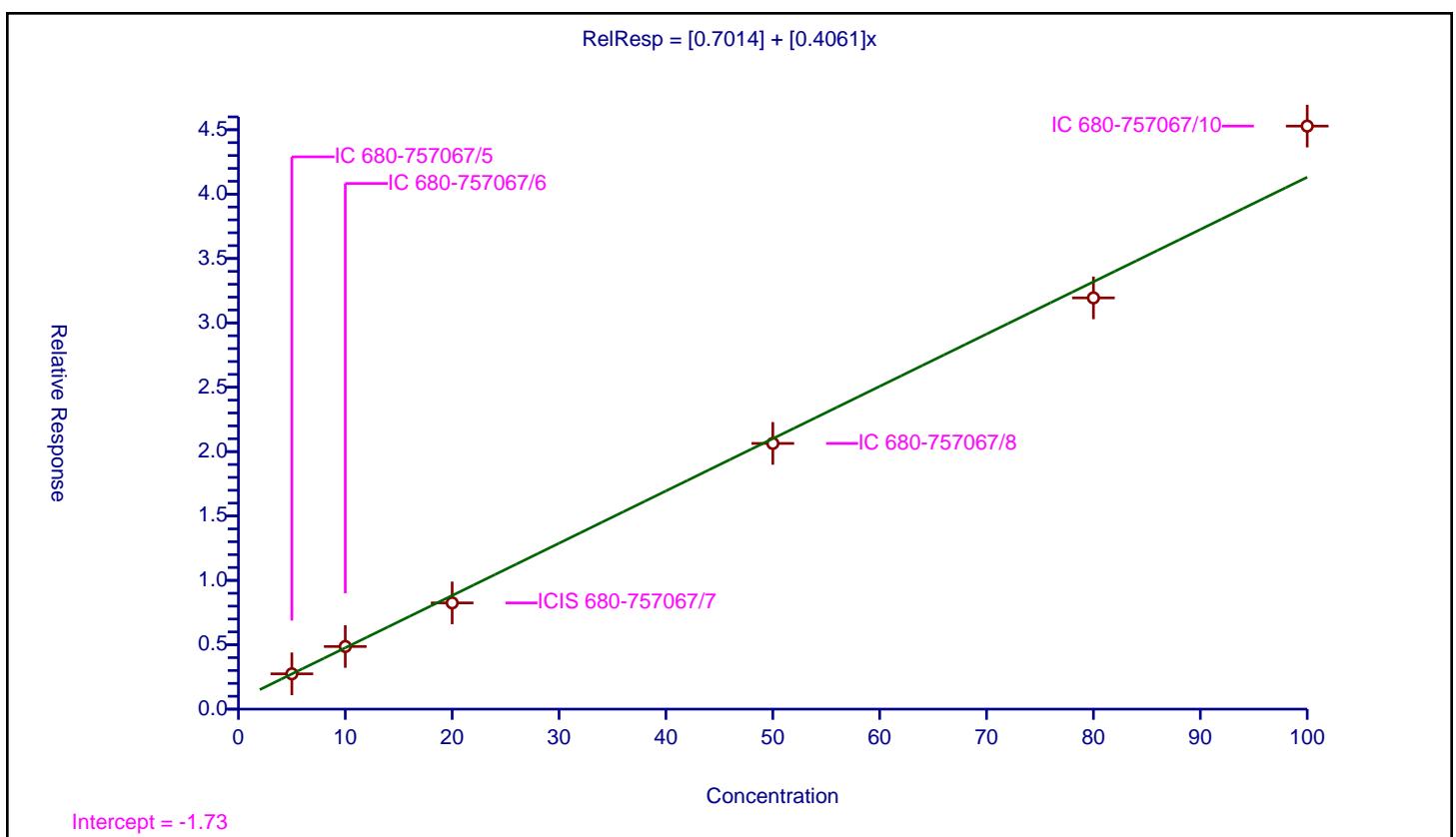
Calibration

/ Propylene glycol

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0.7014
Slope:	0.4061
Error Coefficients	
Standard Error:	4280000
Relative Standard Error:	6.5
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-757067/5	5.0	2.741031	50.0	6770882.0	0.548206	Y
2	IC 680-757067/6	10.0	4.864903	50.0	6287011.0	0.48649	Y
3	ICIS 680-757067/7	20.0	8.251424	50.0	7896964.0	0.412571	Y
4	IC 680-757067/8	50.0	20.637203	50.0	6686553.0	0.412744	Y
5	IC 680-757067/9	80.0	31.942255	50.0	7244681.0	0.399278	Y
6	IC 680-757067/10	100.0	45.284681	50.0	7160236.0	0.452847	Y



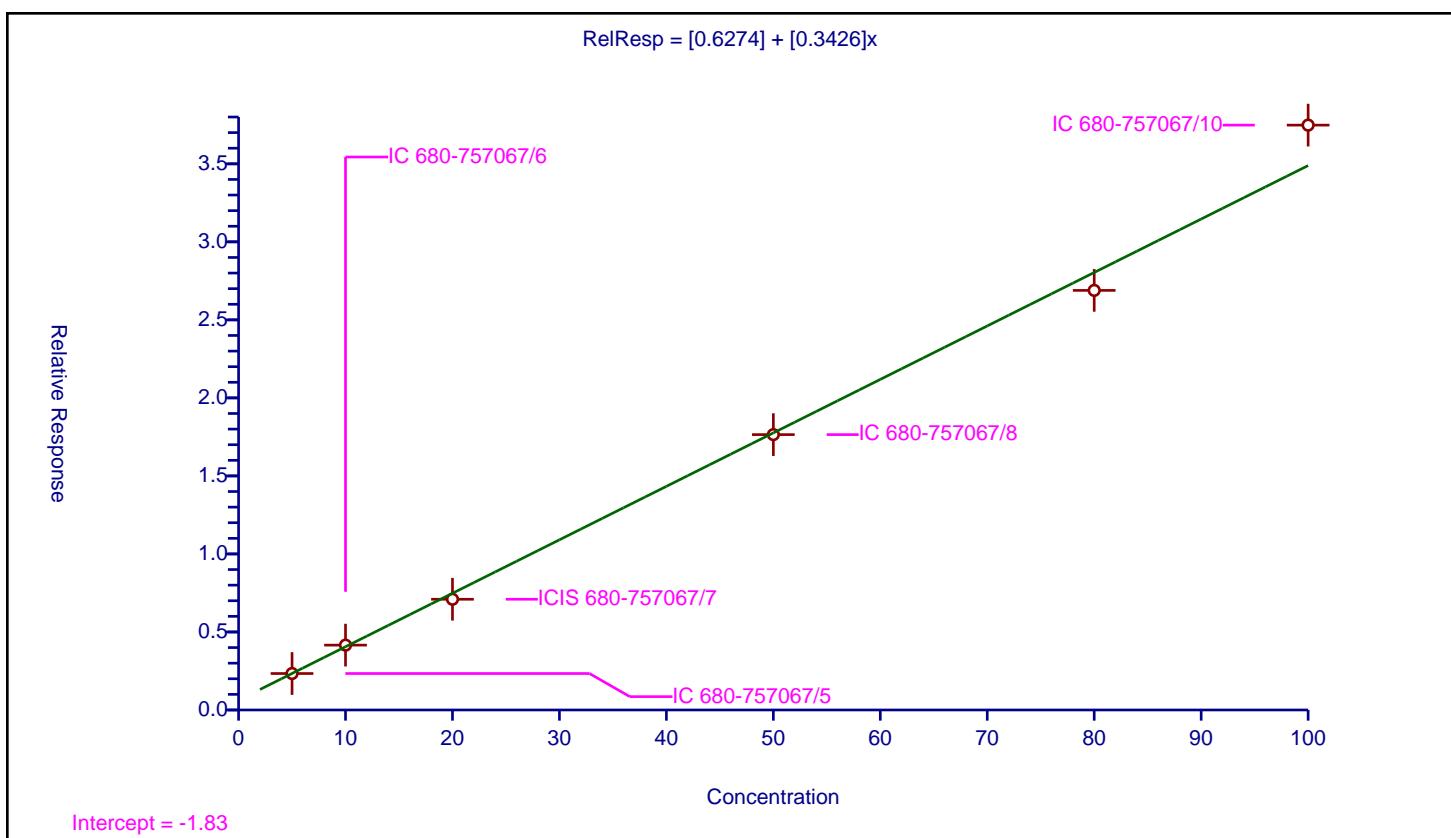
Calibration

/ Ethylene glycol

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0.6274
Slope:	0.3426
Error Coefficients	
Standard Error:	3580000
Relative Standard Error:	5.4
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-757067/5	5.0	2.337738	50.0	6770882.0	0.467548	Y
2	IC 680-757067/6	10.0	4.156602	50.0	6287011.0	0.41566	Y
3	ICIS 680-757067/7	20.0	7.096854	50.0	7896964.0	0.354843	Y
4	IC 680-757067/8	50.0	17.647404	50.0	6686553.0	0.352948	Y
5	IC 680-757067/9	80.0	26.889555	50.0	7244681.0	0.336119	Y
6	IC 680-757067/10	100.0	37.481055	50.0	7160236.0	0.374811	Y



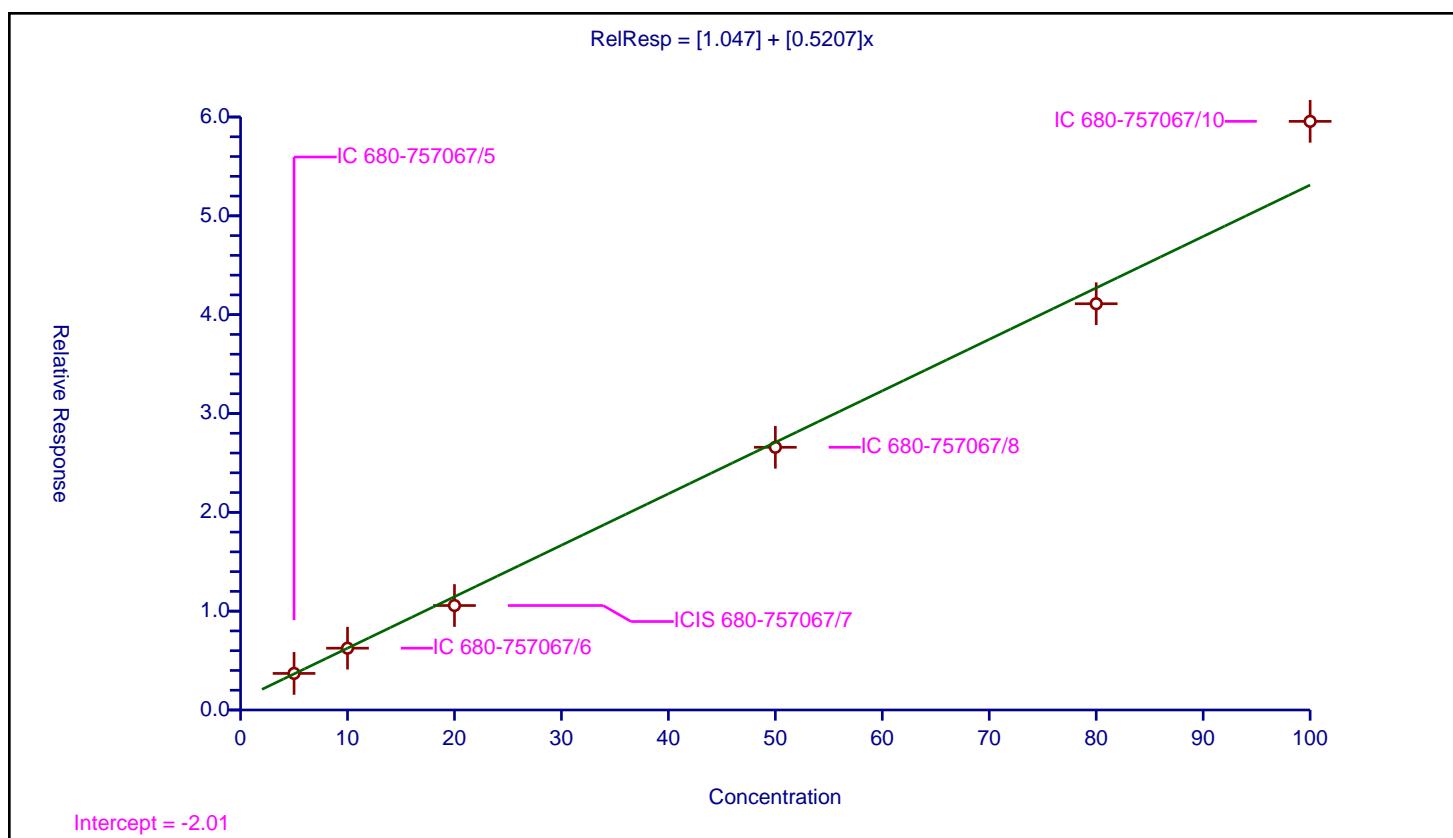
Calibration

/ 2-(2-Butoxyethoxy)ethanol

Curve Type: Linear
 Weighting: Conc_Sq
 Origin: None
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	1.047
Slope:	0.5207
Error Coefficients	
Standard Error:	5580000
Relative Standard Error:	7.9
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-757067/5	5.0	3.701106	50.0	6770882.0	0.740221	Y
2	IC 680-757067/6	10.0	6.253624	50.0	6287011.0	0.625362	Y
3	ICIS 680-757067/7	20.0	10.571455	50.0	7896964.0	0.528573	Y
4	IC 680-757067/8	50.0	26.580833	50.0	6686553.0	0.531617	Y
5	IC 680-757067/9	80.0	41.106931	50.0	7244681.0	0.513837	Y
6	IC 680-757067/10	100.0	59.559517	50.0	7160236.0	0.595595	Y



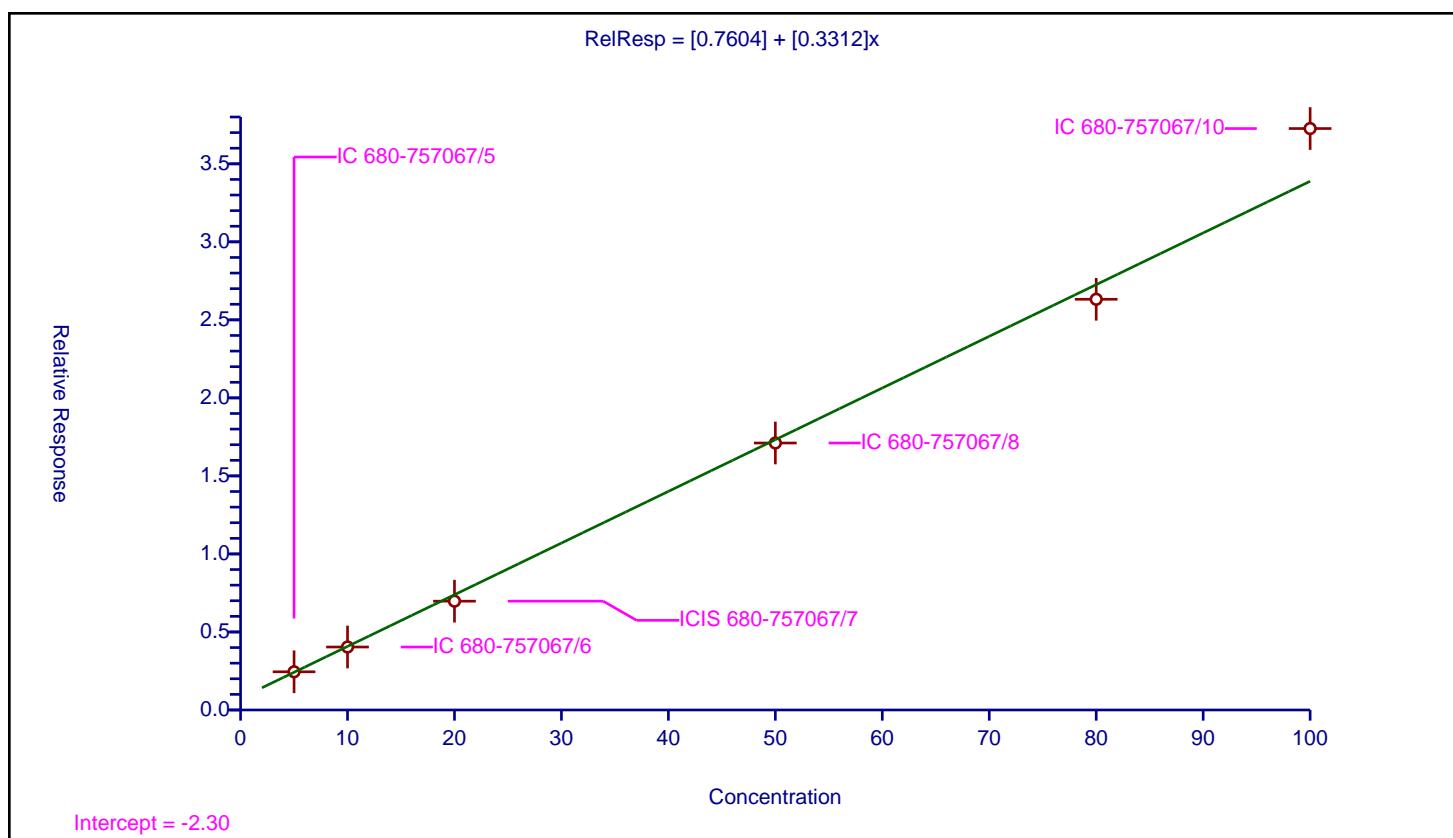
Calibration

/ 2,2'-Oxybisethanol

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0.7604
Slope:	0.3312
Error Coefficients	
Standard Error:	3530000
Relative Standard Error:	6.4
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-757067/5	5.0	2.448809	50.0	6770882.0	0.489762	Y
2	IC 680-757067/6	10.0	4.035654	50.0	6287011.0	0.403565	Y
3	ICIS 680-757067/7	20.0	6.973446	50.0	7896964.0	0.348672	Y
4	IC 680-757067/8	50.0	17.108598	50.0	6686553.0	0.342172	Y
5	IC 680-757067/9	80.0	26.320027	50.0	7244681.0	0.329	Y
6	IC 680-757067/10	100.0	37.262452	50.0	7160236.0	0.372625	Y



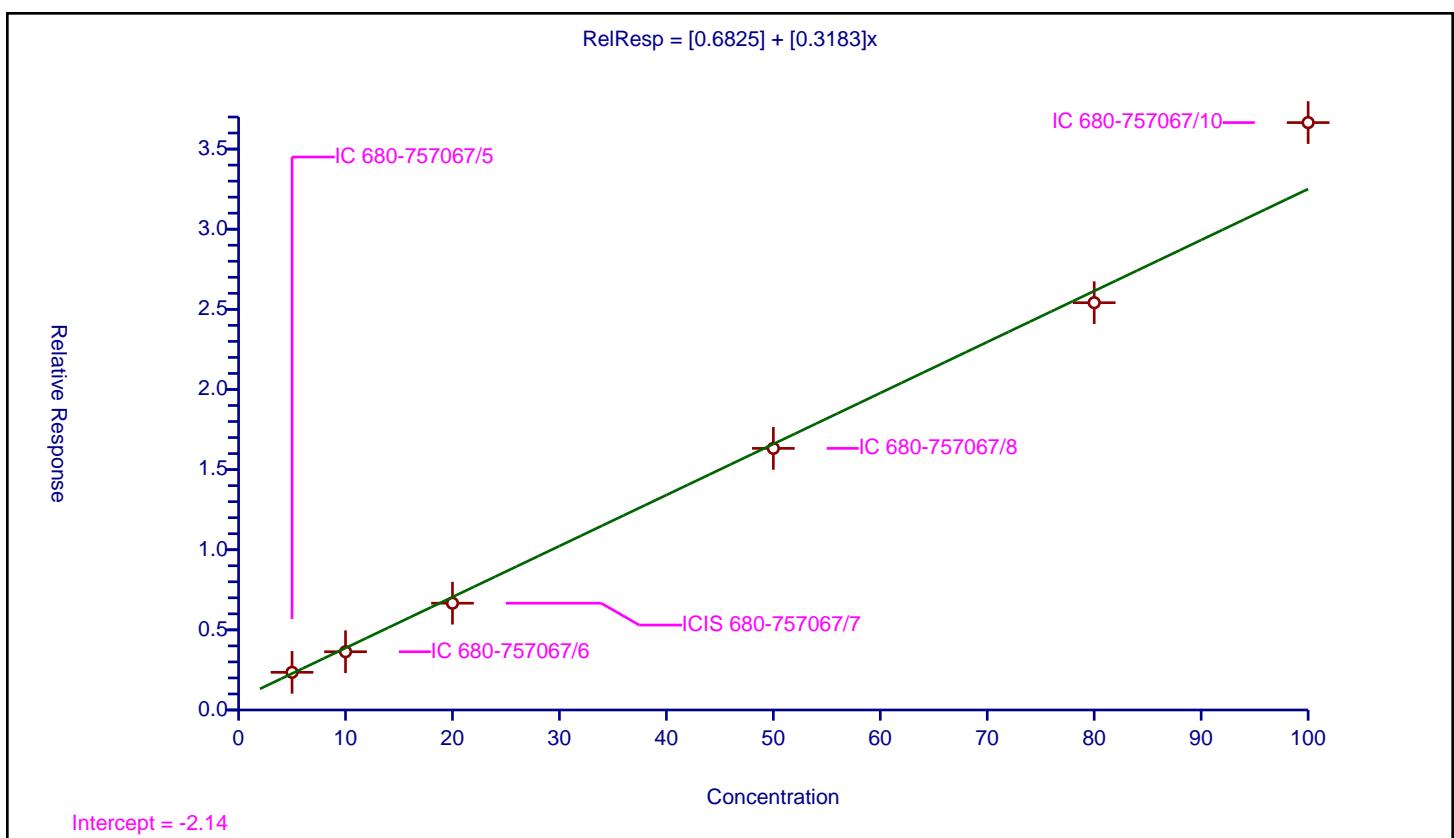
Calibration

/ Triethylene Glycol

Curve Type: Linear
Weighting: Conc_Sq
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0.6825
Slope:	0.3183
Error Coefficients	
Standard Error:	3440000
Relative Standard Error:	8.6
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-757067/5	5.0	2.350683	50.0	6770882.0	0.470137	Y
2	IC 680-757067/6	10.0	3.634358	50.0	6287011.0	0.363436	Y
3	ICIS 680-757067/7	20.0	6.662852	50.0	7896964.0	0.333143	Y
4	IC 680-757067/8	50.0	16.324069	50.0	6686553.0	0.326481	Y
5	IC 680-757067/9	80.0	25.414804	50.0	7244681.0	0.317685	Y
6	IC 680-757067/10	100.0	36.65146	50.0	7160236.0	0.366515	Y



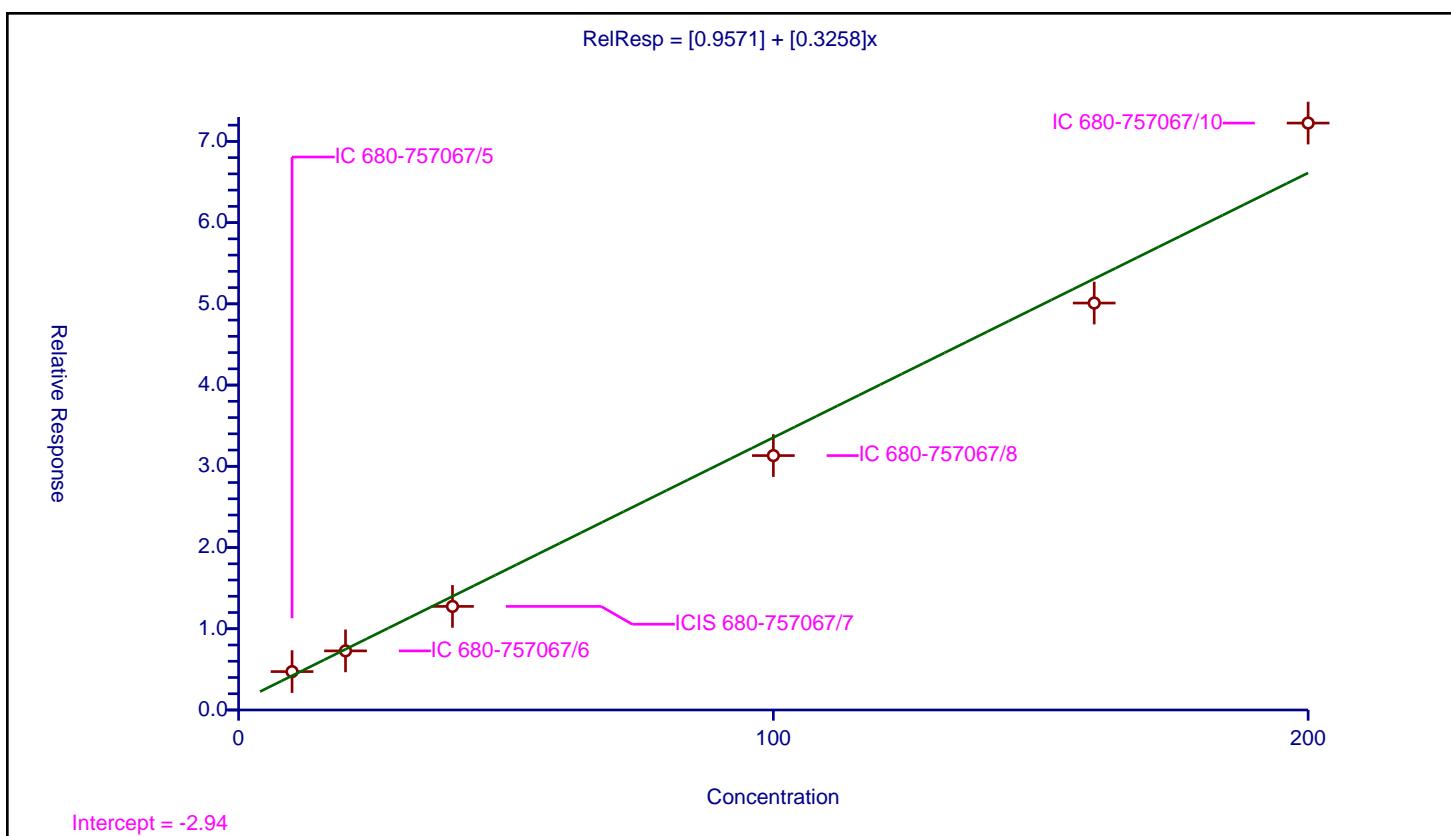
Calibration

/ Tetraethylene Glycol

Curve Type: Linear
Weighting: Conc
Origin: None
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0.9571
Slope:	0.3258
Error Coefficients	
Standard Error:	6760000
Relative Standard Error:	11.3
Correlation Coefficient:	0.985
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 680-757067/5	10.0	4.724879	50.0	6770882.0	0.472488	Y
2	IC 680-757067/6	20.0	7.277401	50.0	6287011.0	0.36387	Y
3	ICIS 680-757067/7	40.0	12.751521	50.0	7896964.0	0.318788	Y
4	IC 680-757067/8	100.0	31.320091	50.0	6686553.0	0.313201	Y
5	IC 680-757067/9	160.0	50.097437	50.0	7244681.0	0.313109	Y
6	IC 680-757067/10	200.0	72.253603	50.0	7160236.0	0.361268	Y



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Lab Sample ID: ICV 680-757067/11 Calibration Date: 12/28/2022 15:15

Instrument ID: CVGG2 Calib Start Date: 12/28/2022 12:59

GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 12/28/2022 14:52

Lab File ID: 22GL28011.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.5827		20.5	20.0	2.4	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin2		0.6182		20.2	20.0	1.1	20.0
2-Butoxyethanol	Lin2		0.6547		21.4	20.0	7.1	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0518		20.0	20.0	-0.0	20.0
Propylene glycol	Lin2		0.4041		18.2	20.0	-9.1	20.0
Ethylene glycol	Lin2		0.3717		19.9	20.0	-0.7	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5706		19.9	20.0	-0.5	20.0
2,2'-Oxybisethanol	Lin2		0.3480		18.7	20.0	-6.4	20.0
Triethylene Glycol	Lin2		0.3508		19.9	20.0	-0.5	20.0
Tetraethylene Glycol	Lin1		0.3418		39.0	40.0	-2.4	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-121397-1
SDG No.: _____
Lab Sample ID: ICV 680-757067/11 Calibration Date: 12/28/2022 15:15
Instrument ID: CVGG2 Calib Start Date: 12/28/2022 12:59
GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 12/28/2022 14:52
Lab File ID: 22GL28011.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	4.07	3.99	4.15
4-Hydroxy-4-methyl-2-pentanone	4.89	4.80	4.99
2-Butoxyethanol	5.26	5.16	5.37
Dipropylene Glycol Methyl Ether	6.92	6.78	7.06
Propylene glycol	7.85	7.69	8.00
Ethylene glycol	8.28	8.12	8.45
2-(2-Butoxyethoxy)ethanol	9.52	9.33	9.71
2,2'-Oxybisethanol	10.20	10.00	10.41
Triethylene Glycol	11.18	10.96	11.41
Tetraethylene Glycol	12.86	12.60	13.12

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28011.D
 Lims ID: icv gly
 Client ID:
 Sample Type: CCV
 Inject. Date: 28-Dec-2022 15:15:08 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0082994-011
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 29-Dec-2022 09:26:04 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1609

First Level Reviewer: SK9U Date: 28-Dec-2022 16:16:40

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Ethanol, 2-propoxy						
4.070	4.068	0.002	1741863	20.0	20.5	
2 4-Hydroxy-4-methyl-2-pentanone						
4.892	4.896	-0.004	1848069	20.0	20.2	
3 2-Butoxyethanol						
5.260	5.266	-0.006	1957072	20.0	21.4	
* 4 n-Heptyl Alcohol						
5.789	5.795	-0.006	7473586	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.915	6.917	-0.002	154885	20.0	20.0	
6 Propylene glycol						
7.848	7.843	0.005	1208039	20.0	18.2	
7 Ethylene glycol						
8.280	8.286	-0.006	1111143	20.0	19.9	
8 2-(2-Butoxyethoxy)ethanol						
9.521	9.522	-0.001	1705839	20.0	19.9	
9 2,2'-Oxybisethanol						
10.199	10.201	-0.002	1040413	20.0	18.7	
10 Triethylene Glycol						
11.179	11.181	-0.002	1048721	20.0	19.9	
11 Tetraethylene Glycol						
12.859	12.861	-0.002	2043714	40.0	39.0	

QC Flag Legend

Processing Flags

Reagents:

SG_GlyICV_00056
SG,GLY,ISTD,00099

Amount Added: 10.00 Units: uL
Amount Added: 10.00 Units: uL Run Reagent

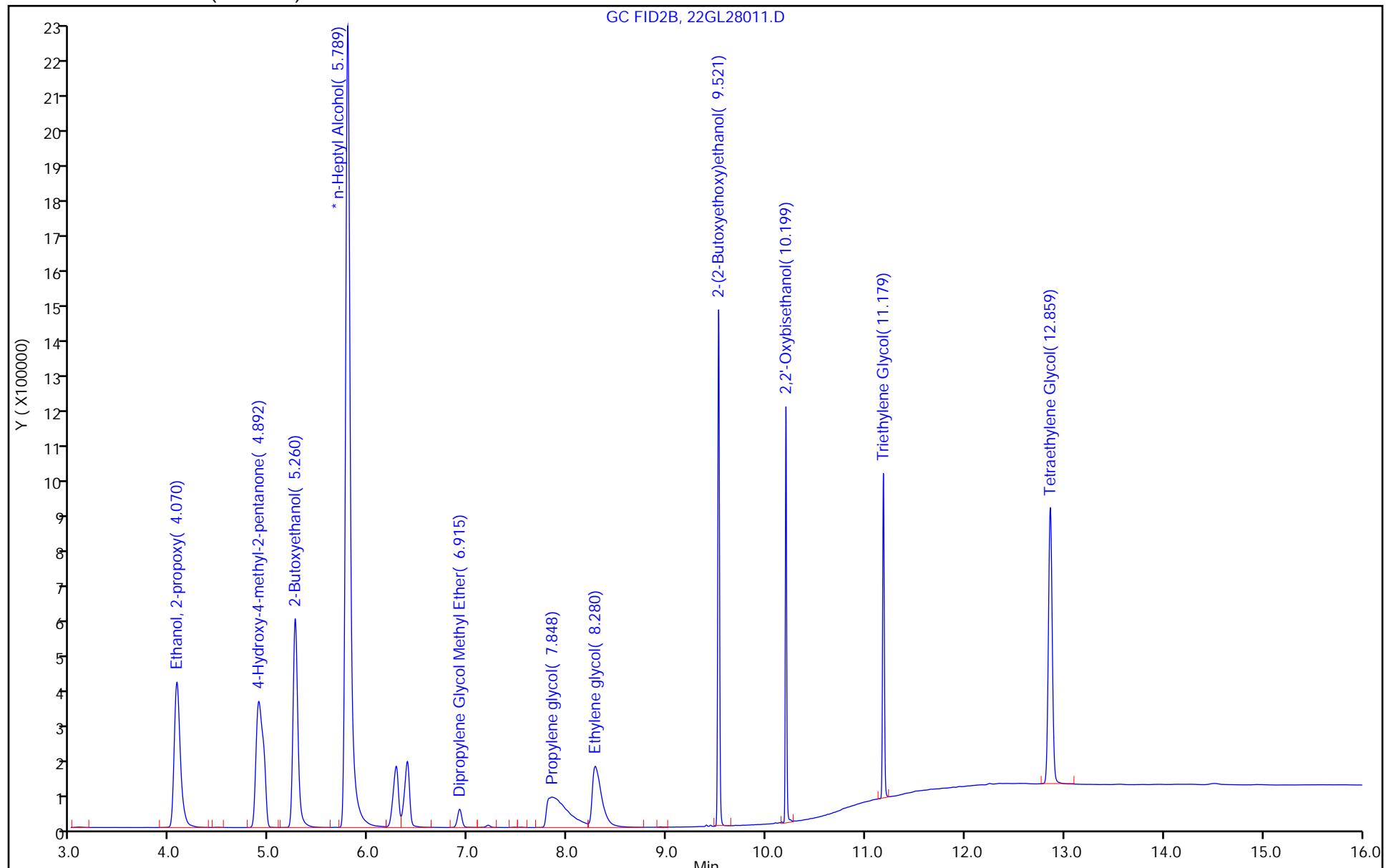
Report Date: 29-Dec-2022 09:26:04

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221228-82994.b\\22GL28011.D
Injection Date: 28-Dec-2022 15:15:08 Instrument ID: CVGG2
Lims ID: icv gly Operator ID:
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Worklist Smp#: 11



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Lab Sample ID: CCVIS 680-757248/5 Calibration Date: 12/29/2022 12:33

Instrument ID: CVGG2 Calib Start Date: 12/28/2022 12:59

GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 12/28/2022 14:52

Lab File ID: 22GL29005.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.5821		20.5	20.0	2.3	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin2		0.6282		20.6	20.0	2.9	20.0
2-Butoxyethanol	Lin2		0.6524		21.3	20.0	6.7	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0513		19.8	20.0	-1.1	20.0
Propylene glycol	Lin2		0.4362		19.8	20.0	-1.2	20.0
Ethylene glycol	Lin2		0.4097		22.1	20.0	10.4	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.5705		19.9	20.0	-0.5	20.0
2,2'-Oxybisethanol	Lin2		0.3743		20.3	20.0	1.5	20.0
Triethylene Glycol	Lin2		0.3953		22.7	20.0	13.5	20.0
Tetraethylene Glycol	Lin1		0.3752		43.1	40.0	7.8	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah Job No.: 580-121397-1
 SDG No.: _____
 Lab Sample ID: CCVIS 680-757248/5 Calibration Date: 12/29/2022 12:33
 Instrument ID: CVGG2 Calib Start Date: 12/28/2022 12:59
 GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 12/28/2022 14:52
 Lab File ID: 22GL29005.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	4.08	4.00	4.16
4-Hydroxy-4-methyl-2-pentanone	4.90	4.80	5.00
2-Butoxyethanol	5.27	5.16	5.37
Dipropylene Glycol Methyl Ether	6.92	6.78	7.06
Propylene glycol	7.84	7.69	8.00
Ethylene glycol	8.29	8.12	8.45
2-(2-Butoxyethoxy)ethanol	9.52	9.33	9.71
2,2'-Oxybisethanol	10.20	10.00	10.40
Triethylene Glycol	11.18	10.96	11.41
Tetraethylene Glycol	12.86	12.60	13.12

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29005.D
 Lims ID: ccvis g3
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 29-Dec-2022 12:33:29 ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0083017-005
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:47 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SK9U Date: 29-Dec-2022 13:09:04

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Ethanol, 2-propoxy						
4.076	4.076	0.000	1009669	20.0	20.5	
2 4-Hydroxy-4-methyl-2-pentanone						
4.899	4.899	0.000	1089726	20.0	20.6	
3 2-Butoxyethanol						
5.267	5.267	0.000	1131641	20.0	21.3	
* 4 n-Heptyl Alcohol					M	
5.793	5.793	0.000	4336532	50.0	50.0	M
5 Dipropylene Glycol Methyl Ether					M	
6.922	6.922	0.000	88988	20.0	19.8	M
6 Propylene glycol						
7.843	7.843	0.000	756613	20.0	19.8	
7 Ethylene glycol						
8.287	8.287	0.000	710600	20.0	22.1	
8 2-(2-Butoxyethoxy)ethanol						
9.522	9.522	0.000	989678	20.0	19.9	
9 2,2'-Oxybisethanol						
10.200	10.200	0.000	649186	20.0	20.3	
10 Triethylene Glycol						
11.181	11.181	0.000	685703	20.0	22.7	
11 Tetraethylene Glycol						
12.860	12.860	0.000	1301580	40.0	43.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

SG_Gly_CAL_00047

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00099

Amount Added: 10.00

Units: uL

Run Reagent

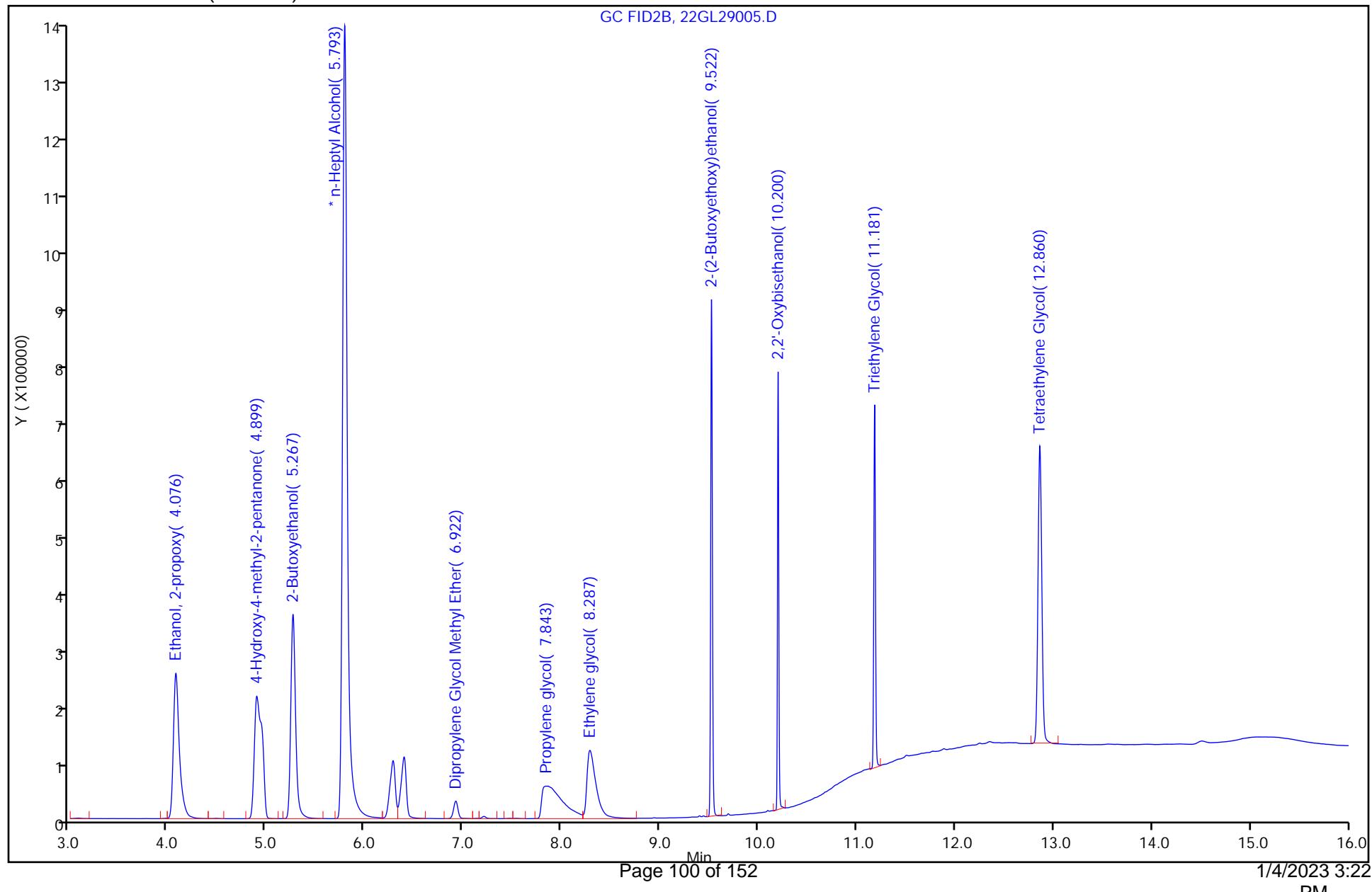
Report Date: 30-Dec-2022 10:54:47

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29005.D
Injection Date: 29-Dec-2022 12:33:29 Instrument ID: CVGG2
Lims ID: ccvis g3 Operator ID:
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 5
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Worklist Smp#: 5



Eurofins Savannah

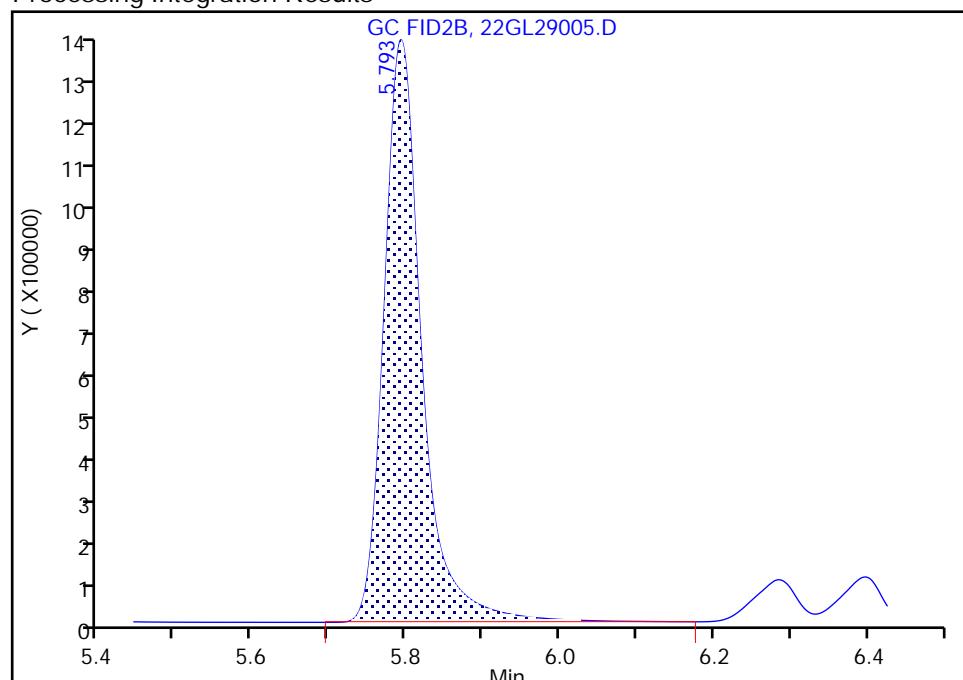
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29005.D
 Injection Date: 29-Dec-2022 12:33:29 Instrument ID: CVGG2
 Lims ID: ccvis g3
 Client ID:
 Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

*** 4 n-Heptyl Alcohol, CAS: 111-70-6**

Signal: 1

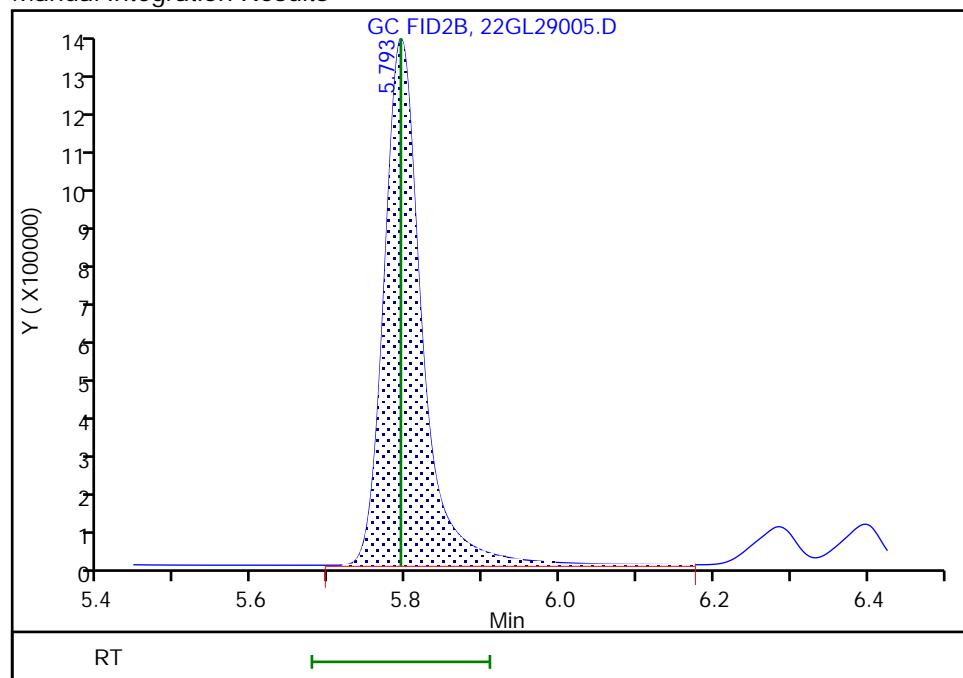
RT: 5.79
 Area: 4320001
 Amount: 50.000000
 Amount Units: ug/ml

Processing Integration Results



RT: 5.79
 Area: 4336532
 Amount: 50.000000
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 29-Dec-2022 12:55:33

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

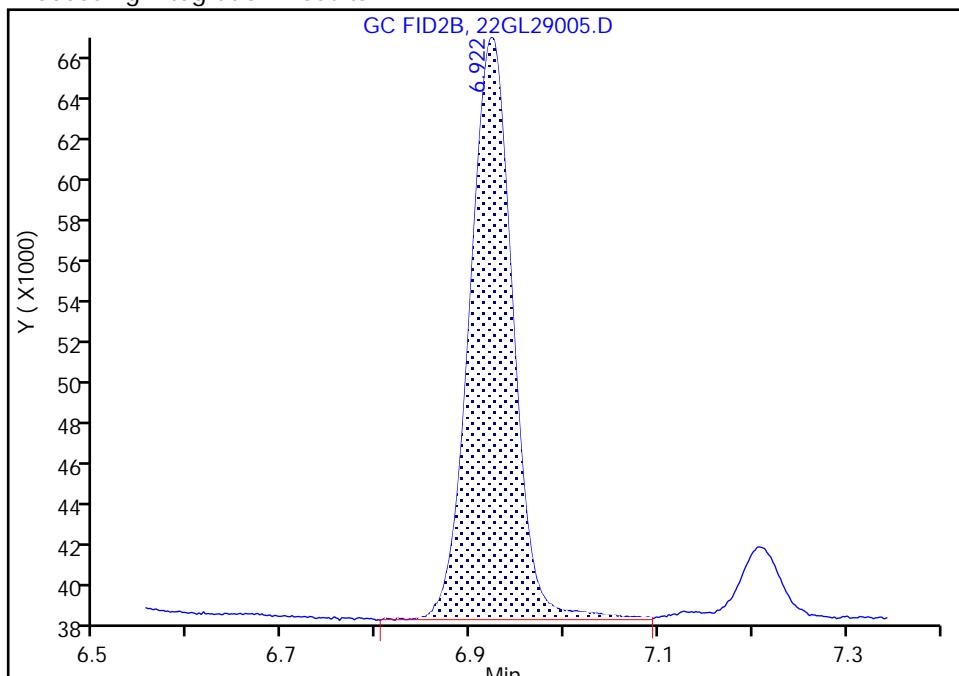
Eurofins Savannah

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29005.D
 Injection Date: 29-Dec-2022 12:33:29 Instrument ID: CVGG2
 Lims ID: ccvis g3
 Client ID:
 Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

5 Dipropylene Glycol Methyl Ether, CAS: 34590-94-8
 Signal: 1

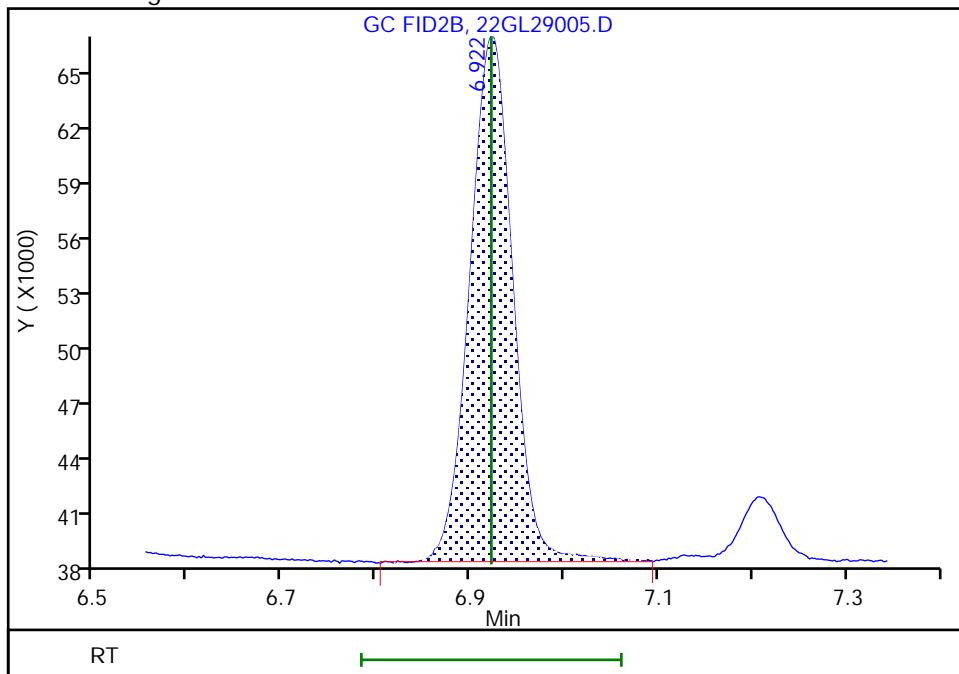
RT: 6.92
 Area: 89423
 Amount: 19.966293
 Amount Units: ug/ml

Processing Integration Results



RT: 6.92
 Area: 88988
 Amount: 19.778772
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 29-Dec-2022 12:55:33

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Lab Sample ID: CCV 680-757248/24 Calibration Date: 12/29/2022 19:44

Instrument ID: CVGG2 Calib Start Date: 12/28/2022 12:59

GC Column: J&W DB WAX ID: 0.45 (mm) Calib End Date: 12/28/2022 14:52

Lab File ID: 22GL29024.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol, 2-propoxy	Lin2		0.5657		19.8	20.0	-0.8	20.0
4-Hydroxy-4-methyl-2-pentanone	Lin2		0.4902		15.7	20.0	-21.6*	20.0
2-Butoxyethanol	Lin2		0.6329		20.7	20.0	3.3	20.0
Dipropylene Glycol Methyl Ether	Lin2		0.0327		12.0	20.0	-39.9*	20.0
Propylene glycol	Lin2		0.2285		9.52	20.0	-52.4*	20.0
Ethylene glycol	Lin2		0.1746		8.36	20.0	-58.2*	20.0
2-(2-Butoxyethoxy)ethanol	Lin2		0.3030		9.63	20.0	-51.9*	20.0
2,2'-Oxybisethanol	Lin2		0.0306		5.00	20.0	-102.2*	20.0
Triethylene Glycol	Lin2		0.0059		2.50	20.0	-108.9*	20.0
Tetraethylene Glycol	Lin1		0.0014		10.0	40.0	-106.9*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Lab Sample ID: CCV 680-757248/24

Calibration Date: 12/29/2022 19:44

Instrument ID: CVGG2

Calib Start Date: 12/28/2022 12:59

GC Column: J&W DB WAX ID: 0.45 (mm)

Calib End Date: 12/28/2022 14:52

Lab File ID: 22GL29024.D

Analyte	RT	RT WINDOW	
		FROM	TO
Ethanol, 2-propoxy	4.07	3.98	4.15
4-Hydroxy-4-methyl-2-pentanone	4.89	4.79	4.99
2-Butoxyethanol	5.26	5.15	5.36
Dipropylene Glycol Methyl Ether	6.91	6.77	7.05
Propylene glycol	7.81	7.65	7.96
Ethylene glycol	8.27	8.11	8.44
2-(2-Butoxyethoxy)ethanol	9.52	9.33	9.71
2,2'-Oxybisethanol	10.20	9.99	10.40
Triethylene Glycol	11.18	10.95	11.40
Tetraethylene Glycol	12.86	12.60	13.11

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29024.D
 Lims ID: ccv g3
 Client ID:
 Sample Type: CCV
 Inject. Date: 29-Dec-2022 19:44:50 ALS Bottle#: 24 Worklist Smp#: 24
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0083017-024
 Operator ID: Instrument ID: CVGG2
 Sublist: chrom-8015_GLY_VGG*sub2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:55:45 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SK9U Date: 29-Dec-2022 20:16:06

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
-----------	---------------	---------------	----------	---------------	-----------------	-------

1 Ethanol, 2-propoxy						
4.065	4.065	0.000	1893816	20.0	19.8	
2 4-Hydroxy-4-methyl-2-pentanone						
4.887	4.887	0.000	1641032	20.0	15.7	
3 2-Butoxyethanol						
5.257	5.257	0.000	2118669	20.0	20.7	
* 4 n-Heptyl Alcohol						
5.785	5.785	0.000	8369231	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.912	6.912	0.000	109604	20.0	12.0	
6 Propylene glycol					M	
7.808	7.808	0.000	764872	20.0	9.52	M
7 Ethylene glycol					M	
8.273	8.273	0.000	584479	20.0	8.36	M
8 2-(2-Butoxyethoxy)ethanol						
9.518	9.518	0.000	1014264	20.0	9.63	
9 2,2'-Oxybisethanol						
10.197	10.197	0.000	102537	20.0	-0.4462	
10 Triethylene Glycol					Ma	
11.177	11.177	0.000	19717	20.0	-1.77	a
11 Tetraethylene Glycol					M	
12.856	12.856	0.000	9452	40.0	-2.76	Ma

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SG_Gly_CAL_00047

Amount Added: 10.00

Units: uL

SG,GLY,ISTD,00099

Amount Added: 10.00

Units: uL

Run Reagent

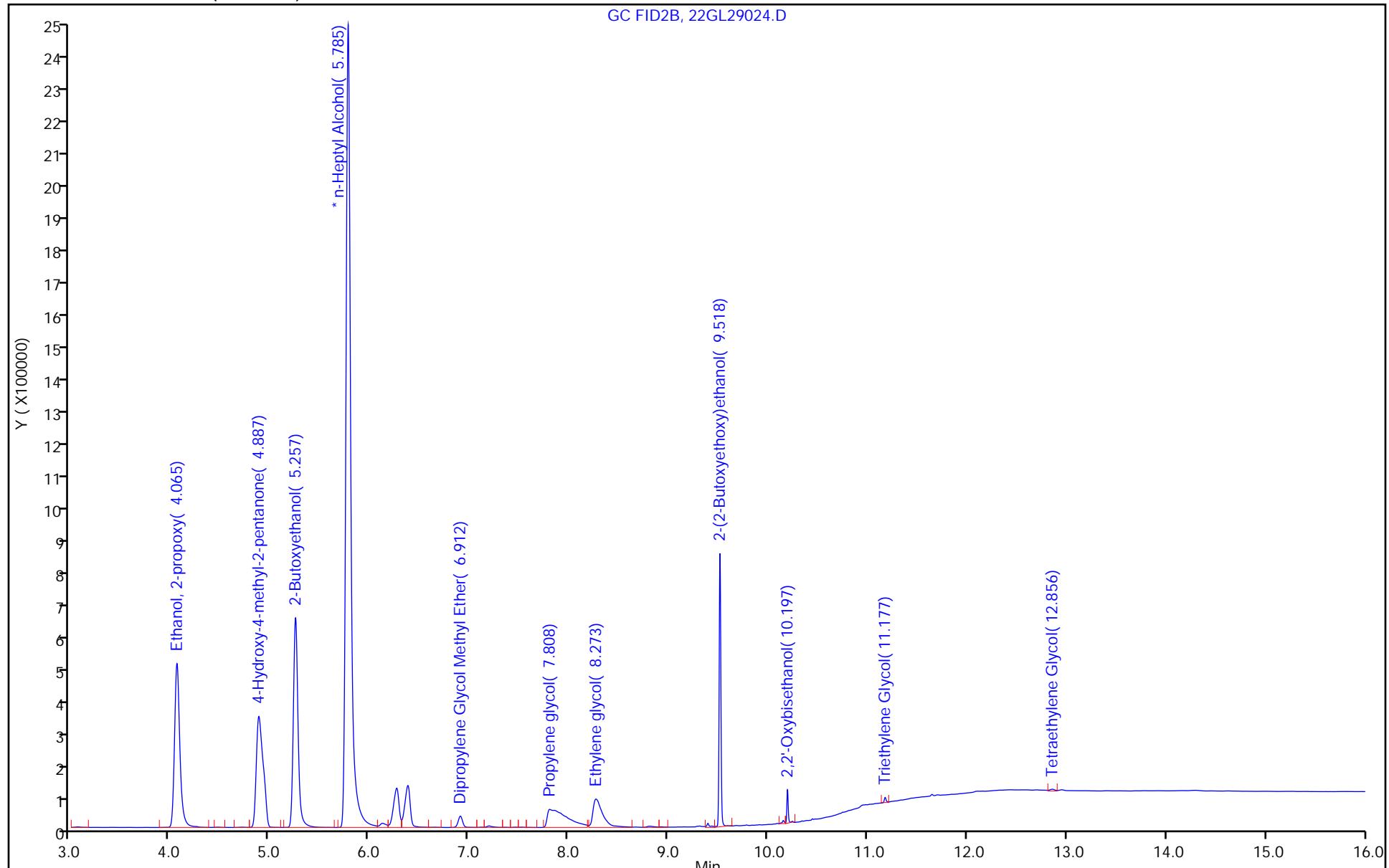
Report Date: 30-Dec-2022 10:55:45

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29024.D
Injection Date: 29-Dec-2022 19:44:50 Instrument ID: CVGG2
Lims ID: ccv g3 Operator ID:
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 24
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Worklist Smp#: 24



Eurofins Savannah

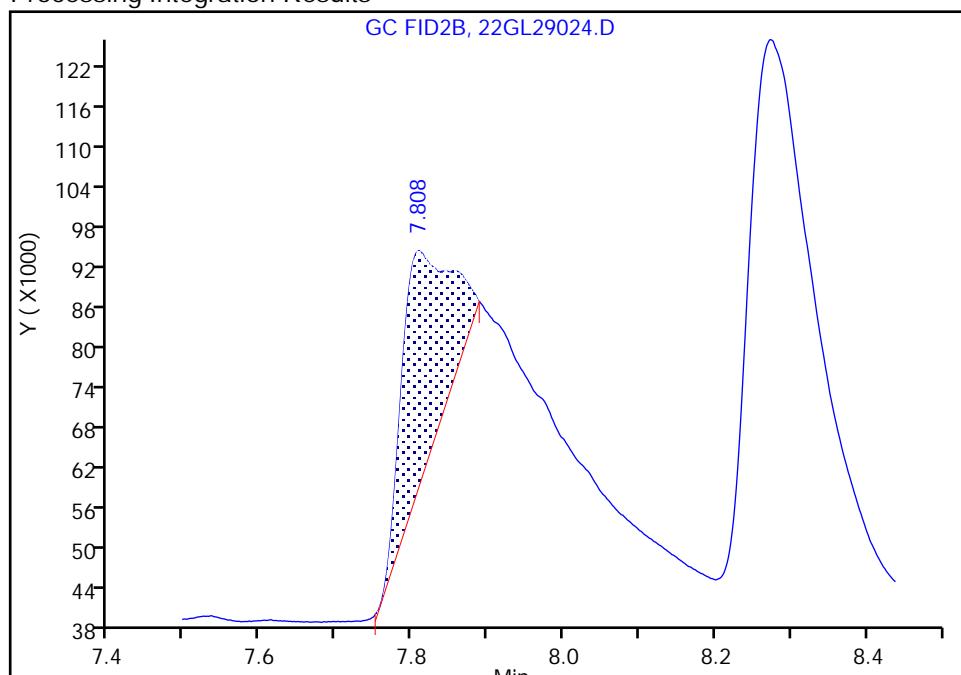
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29024.D
 Injection Date: 29-Dec-2022 19:44:50 Instrument ID: CVGG2
 Lims ID: ccv g3
 Client ID:
 Operator ID: ALS Bottle#: 24 Worklist Smp#: 24
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

6 Propylene glycol, CAS: 57-55-6

Signal: 1

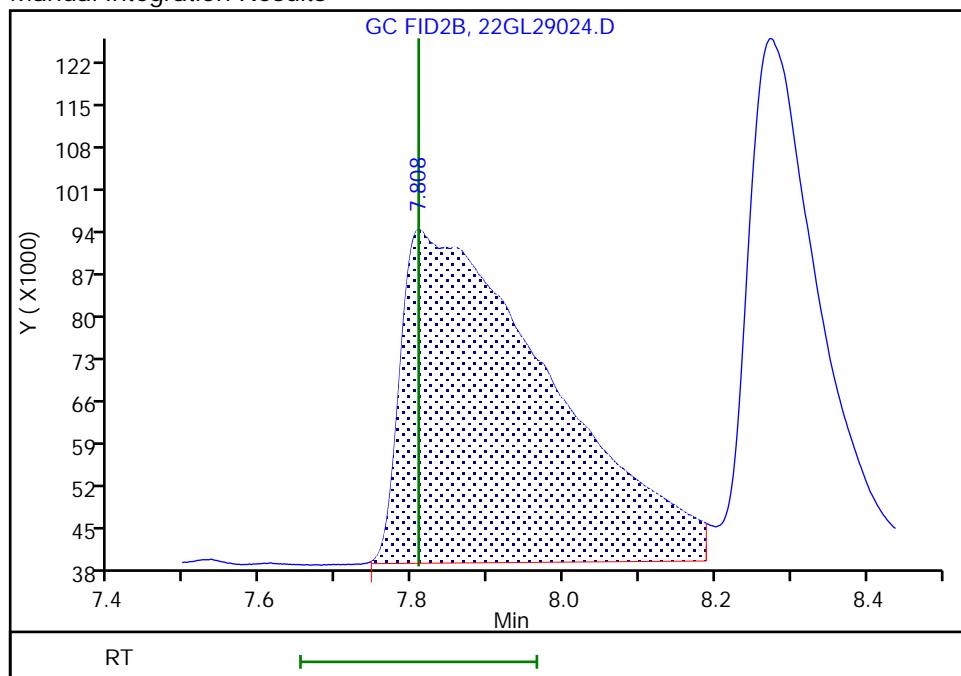
RT: 7.81
 Area: 146025
 Amount: 0.421052
 Amount Units: ug/ml

Processing Integration Results



RT: 7.81
 Area: 764872
 Amount: 9.524197
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 29-Dec-2022 20:13:31

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

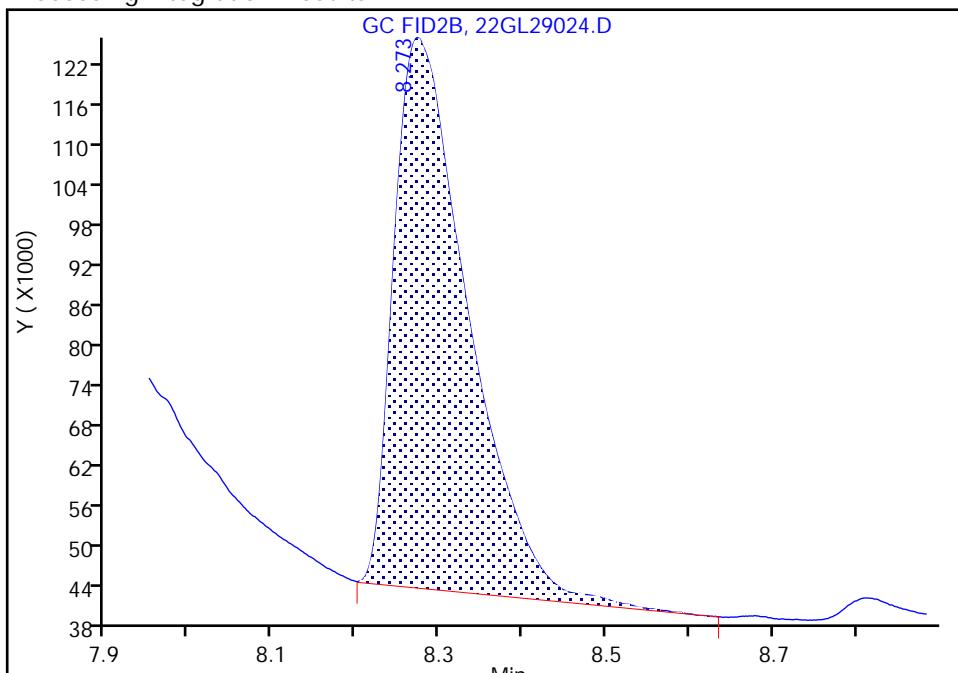
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29024.D
 Injection Date: 29-Dec-2022 19:44:50 Instrument ID: CVGG2
 Lims ID: ccv g3
 Client ID:
 Operator ID: ALS Bottle#: 24 Worklist Smp#: 24
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

7 Ethylene glycol, CAS: 107-21-1

Signal: 1

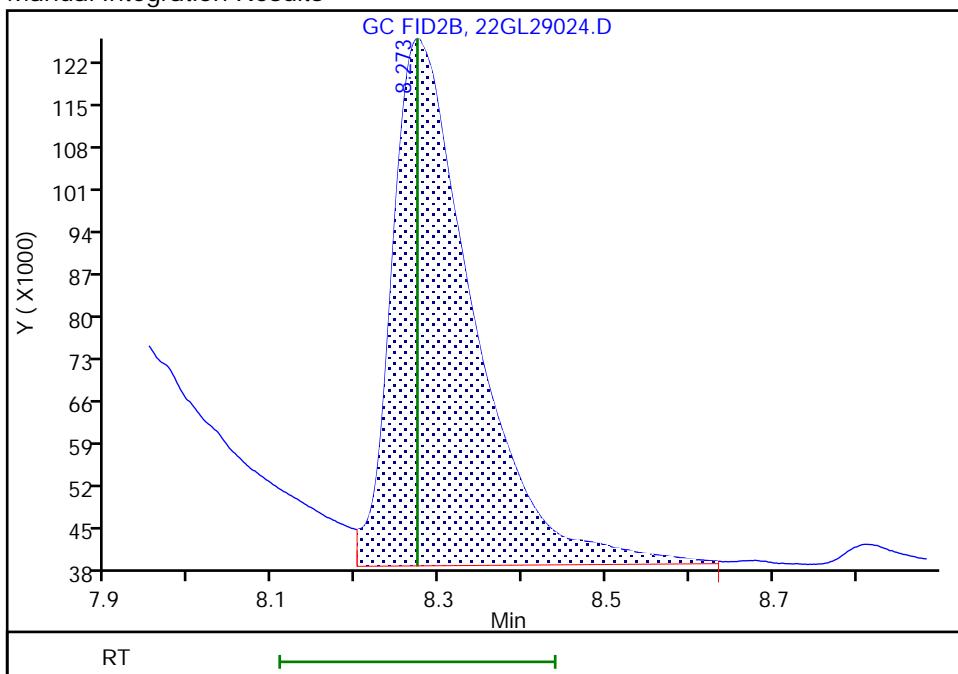
RT: 8.27
 Area: 506889
 Amount: 7.007558
 Amount Units: ug/ml

Processing Integration Results



RT: 8.27
 Area: 584479
 Amount: 8.360531
 Amount Units: ug/ml

Manual Integration Results



Reviewer: SK9U, 29-Dec-2022 20:13:31

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins Savannah

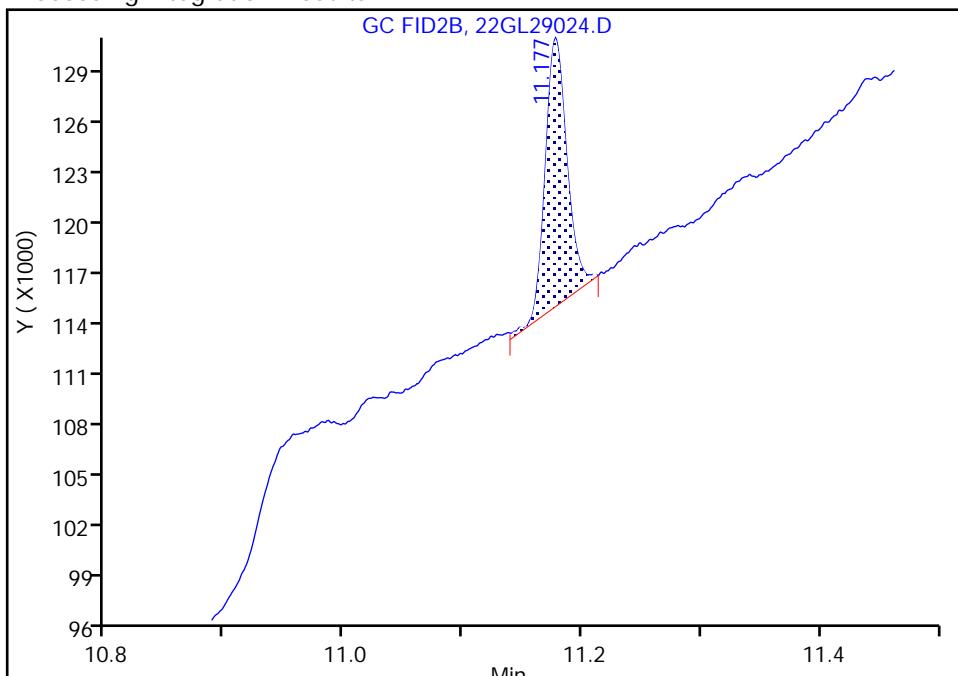
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29024.D
 Injection Date: 29-Dec-2022 19:44:50 Instrument ID: CVGG2
 Lims ID: ccv g3
 Client ID:
 Operator ID: ALS Bottle#: 24 Worklist Smp#: 24
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

10 Triethylene Glycol, CAS: 112-27-6

Signal: 1

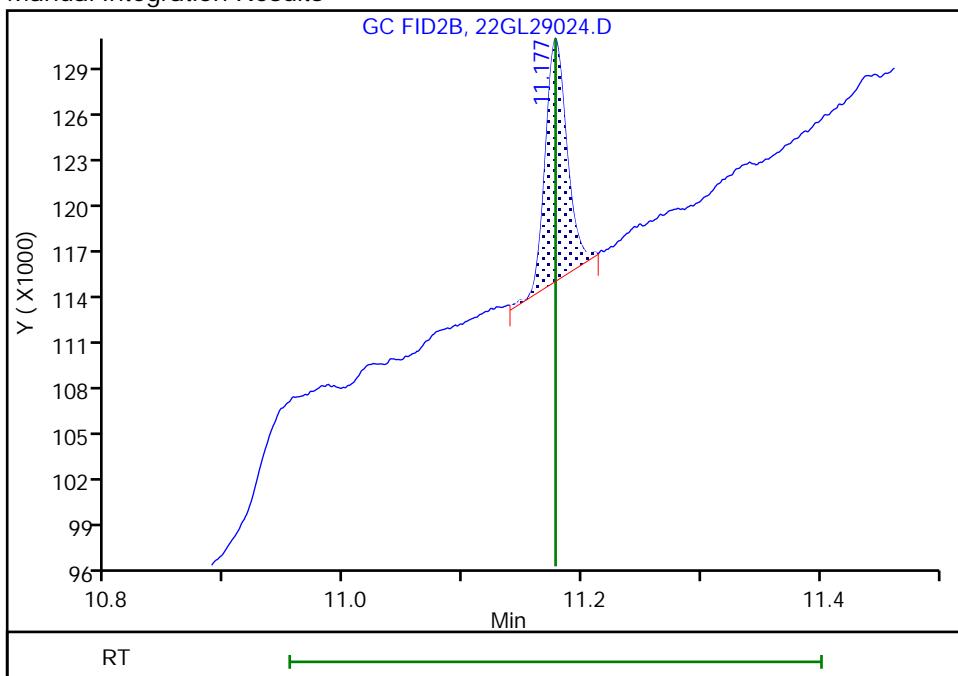
Processing Integration Results

RT: 11.18
 Area: 19717
 Amount: -1.774477
 Amount Units: ug/ml



Manual Integration Results

RT: 11.18
 Area: 19717
 Amount: -1.774477
 Amount Units: ug/ml



Reviewer: SK9U, 29-Dec-2022 20:17:08

Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

Eurofins Savannah

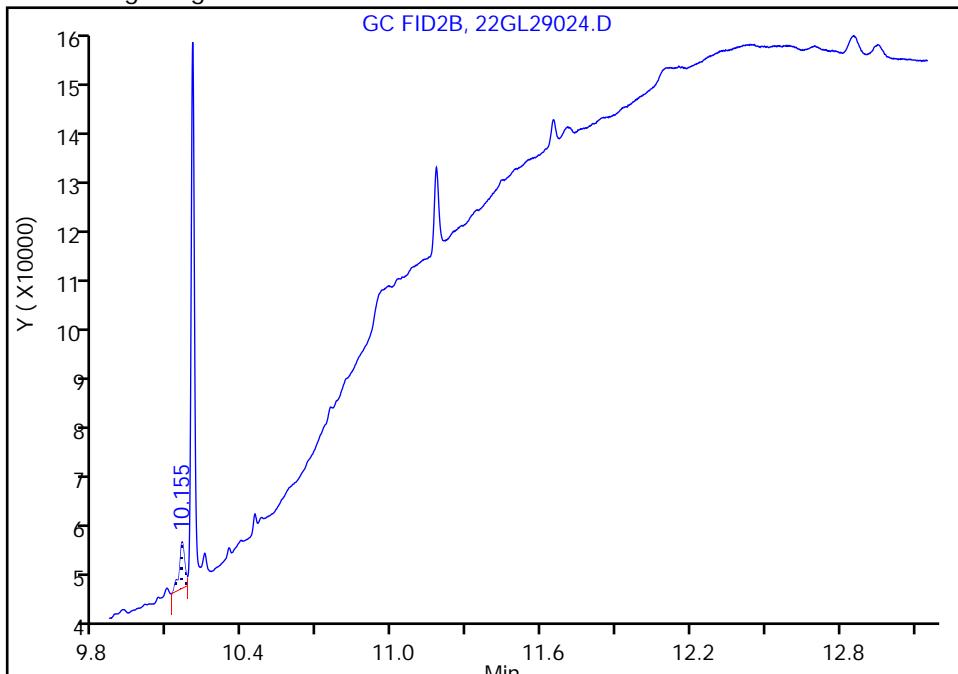
Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29024.D
 Injection Date: 29-Dec-2022 19:44:50 Instrument ID: CVGG2
 Lims ID: ccv g3
 Client ID:
 Operator ID: ALS Bottle#: 24 Worklist Smp#: 24
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 8015_GLY_VGG Limit Group: 8015C_DAI
 Column: J&W DB WAX (0.45 mm) Detector: GC FID2B

11 Tetraethylene Glycol, CAS: 112-60-7

Signal: 1

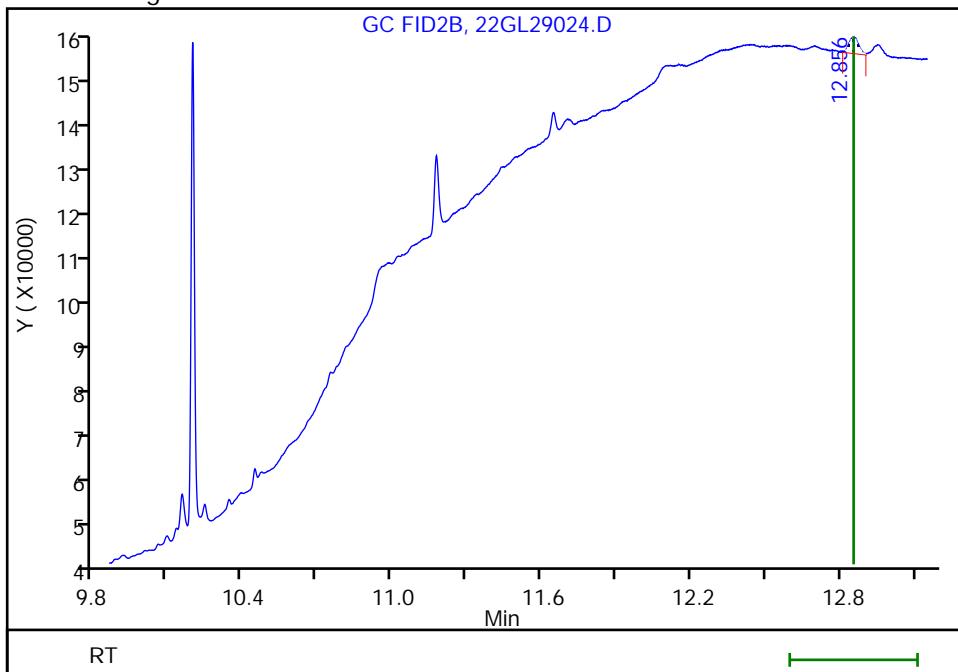
Processing Integration Results

RT: 10.15
 Area: 12723
 Amount: -2.704225
 Amount Units: ug/ml



Manual Integration Results

RT: 12.86
 Area: 9452
 Amount: -2.764203
 Amount Units: ug/ml



Reviewer: SK9U, 29-Dec-2022 20:17:31

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-121397-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 680-757073/1-A

Matrix: Solid (Soluble) Lab File ID: 22GL29010.D

Analysis Method: 8015C GLY Date Collected: _____

Extraction Method: _____ Date Extracted: _____

Sample wt/vol: 1 (mL) Date Analyzed: 12/29/2022 14:28

Con. Extract Vol.: 1 (mL) Dilution Factor: 1

Injection Volume: 1 (uL) GC Column: J&W DB WAX ID: 0.45 (mm)

% Moisture: _____ % Solids: _____ GPC Cleanup: (Y/N) N

Cleanup Factor: _____

Analysis Batch No.: 757248 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	1.4	U	4.7	1.4	0.58

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29010.D
 Lims ID: MB 680-757073/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 29-Dec-2022 14:28:13 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0083017-010
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:09 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SWK1 Date: 30-Dec-2022 10:52:43

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
5.785 5.785 0.000 6208429 50.0 50.0

Reagents:

SG_GLY_ISTD_00099 Amount Added: 10.00 Units: uL Run Reagent

Report Date: 30-Dec-2022 10:54:42

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29010.D

Injection Date: 29-Dec-2022 14:28:13

Instrument ID: CVGG2

Operator ID:

Lims ID: MB 680-757073/1-A

Worklist Smp#: 10

Client ID:

Injection Vol: 1.0 ul

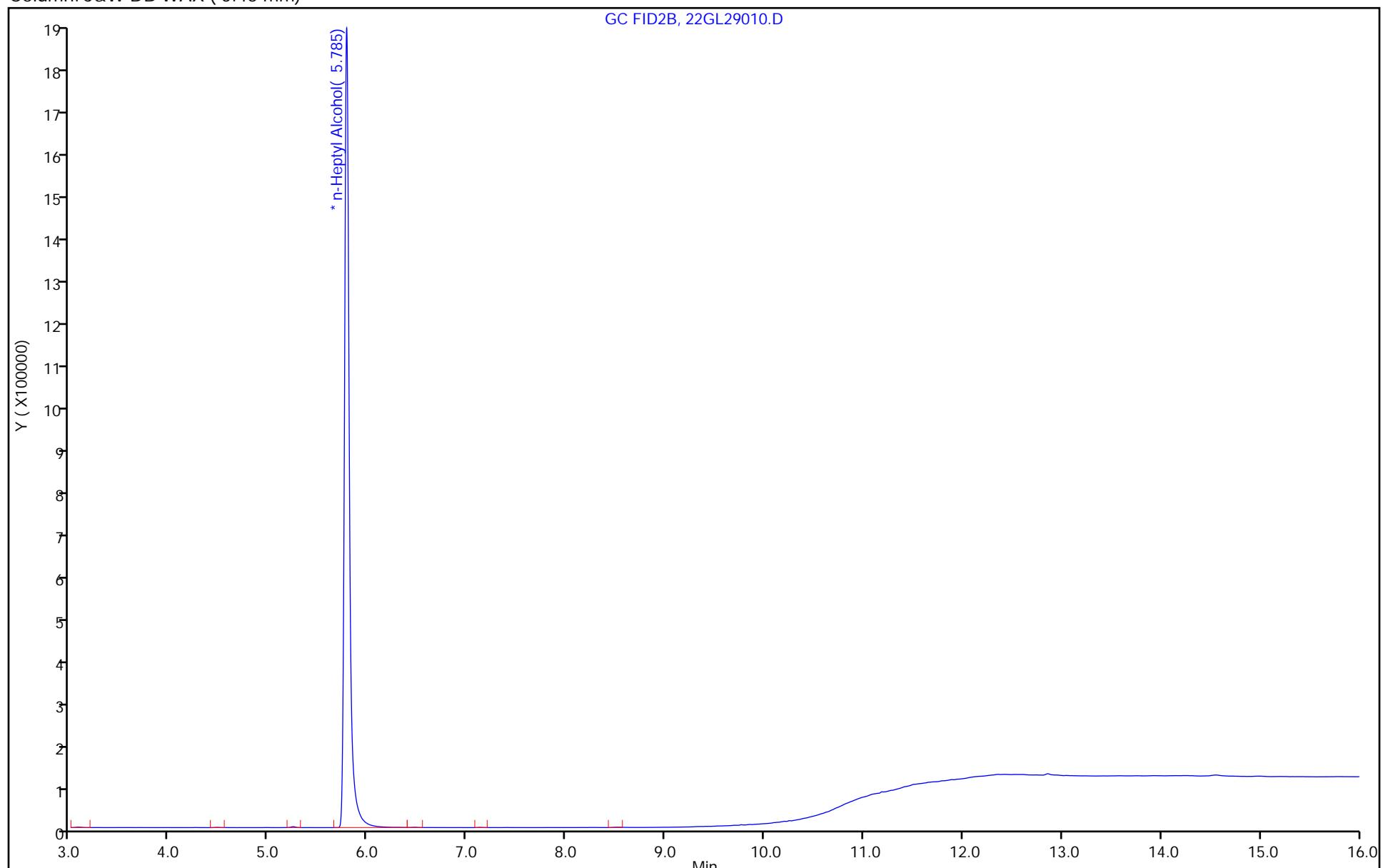
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: 8015_GLY_VGG

Limit Group: 8015C_DAI

Column: J&W DB WAX (0.45 mm)



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-121397-1
SDG No.:
Client Sample ID: Lab Sample ID: LCS 680-757073/2-A
Matrix: Solid (Soluble) Lab File ID: 22GL29006.D
Analysis Method: 8015C GLY Date Collected:
Extraction Method: Date Extracted:
Sample wt/vol: 1 (mL) Date Analyzed: 12/29/2022 12:57
Con. Extract Vol.: 1 (mL) Dilution Factor: 1
Injection Volume: 1 (uL) GC Column: J&W DB WAX ID: 0.45 (mm)
% Moisture: % Solids: GPC Cleanup: (Y/N) N
Cleanup Factor:
Analysis Batch No.: 757248 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	39.1		4.9	1.5	0.61

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29006.D
 Lims ID: LCS 680-757073/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 29-Dec-2022 12:57:40 ALS Bottle#: 6 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0083017-006
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:47 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SWK1 Date: 30-Dec-2022 10:52:28

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy						
4.073	4.076	-0.003	1918732	20.0	38.3	
2 4-Hydroxy-4-methyl-2-pentanone						
4.895	4.899	-0.004	2053236	20.0	38.2	
3 2-Butoxyethanol						
5.262	5.267	-0.005	2078144	20.0	38.6	
* 4 n-Heptyl Alcohol						
5.788	5.793	-0.005	4555811	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.916	6.922	-0.006	176346	20.0	38.8	
6 Propylene glycol					M	
7.843	7.843	0.000	1490488	20.0	38.5	M
7 Ethylene glycol					M	
8.281	8.287	-0.006	1253879	20.0	38.3	M
8 2-(2-Butoxyethoxy)ethanol						
9.521	9.522	-0.001	1972001	20.0	39.6	
9 2,2'-Oxybisethanol						
10.198	10.200	-0.002	1239288	20.0	38.8	
10 Triethylene Glycol						
11.179	11.181	-0.002	1201305	20.0	39.3	
11 Tetraethylene Glycol						
12.860	12.860	0.000	2239764	40.0	72.5	

QC Flag Legend

Processing Flags

Report Date: 30-Dec-2022 10:54:48

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Review Flags

M - Manually Integrated

Reagents:

SG,GLY,ISTD,00099

Amount Added: 10.00

Units: uL

Run Reagent

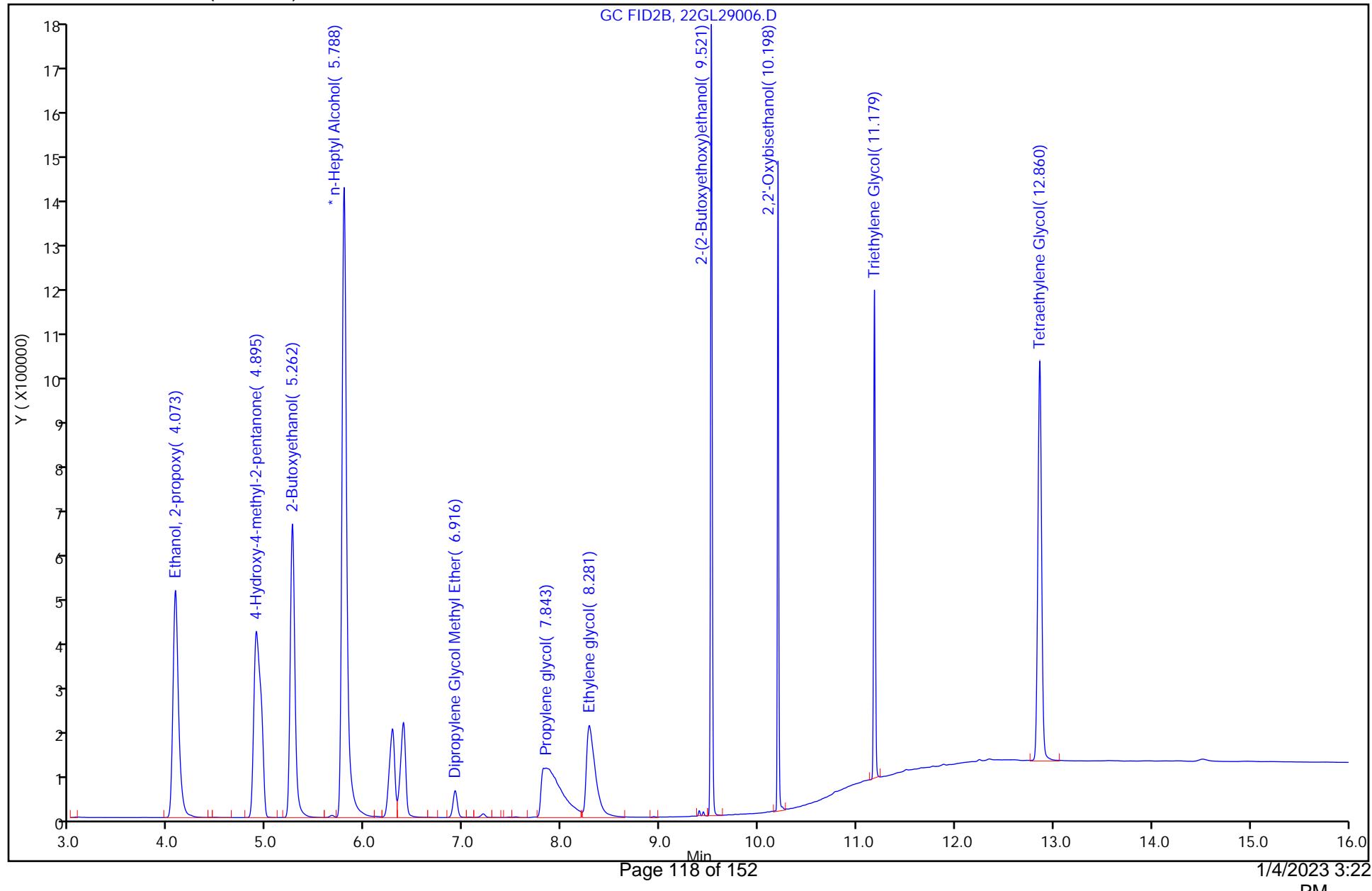
Report Date: 30-Dec-2022 10:54:48

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29006.D
Injection Date: 29-Dec-2022 12:57:40 Instrument ID: CVGG2
Lims ID: LCS 680-757073/2-A Operator ID:
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 6
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Worklist Smp#: 6



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah Job No.: 580-121397-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCSD 680-757073/3-A

Matrix: Solid (Soluble) Lab File ID: 22GL29007.D

Analysis Method: 8015C GLY Date Collected: _____

Extraction Method: _____ Date Extracted: _____

Sample wt/vol: 1 (mL) Date Analyzed: 12/29/2022 13:20

Con. Extract Vol.: 1 (mL) Dilution Factor: 1

Injection Volume: 1 (uL) GC Column: J&W DB WAX ID: 0.45 (mm)

% Moisture: _____ % Solids: _____ GPC Cleanup: (Y/N) N

Cleanup Factor: _____

Analysis Batch No.: 757248 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	45.0		4.7	1.4	0.59

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29007.D
 Lims ID: LCSD 680-757073/3-A
 Client ID:
 Sample Type: LCSD
 Inject. Date: 29-Dec-2022 13:20:21 ALS Bottle#: 7 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0083017-007
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:47 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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1 Ethanol, 2-propoxy						
4.071	4.076	-0.005	1955553	20.0	47.0	
2 4-Hydroxy-4-methyl-2-pentanone						
4.893	4.899	-0.006	2085059	20.0	46.7	
3 2-Butoxyethanol						
5.260	5.267	-0.007	2111548	20.0	47.1	
* 4 n-Heptyl Alcohol						
5.787	5.793	-0.006	3814816	50.0	50.0	
5 Dipropylene Glycol Methyl Ether						
6.915	6.922	-0.007	174420	20.0	46.1	
6 Propylene glycol						
7.824	7.843	-0.019	1490232	20.0	46.4	
7 Ethylene glycol						
8.280	8.287	-0.007	1245873	20.0	45.8	
8 2-(2-Butoxyethoxy)ethanol						
9.521	9.522	-0.001	1968327	20.0	47.5	
9 2,2'-Oxybisethanol						
10.199	10.200	-0.001	1229088	20.0	46.3	
10 Triethylene Glycol						
11.179	11.181	-0.002	1153896	20.0	45.4	
11 Tetraethylene Glycol						
12.858	12.860	-0.002	2161549	40.0	84.0	

Reagents:

SG_GLY_ISTD_00099 Amount Added: 10.00 Units: uL Run Reagent

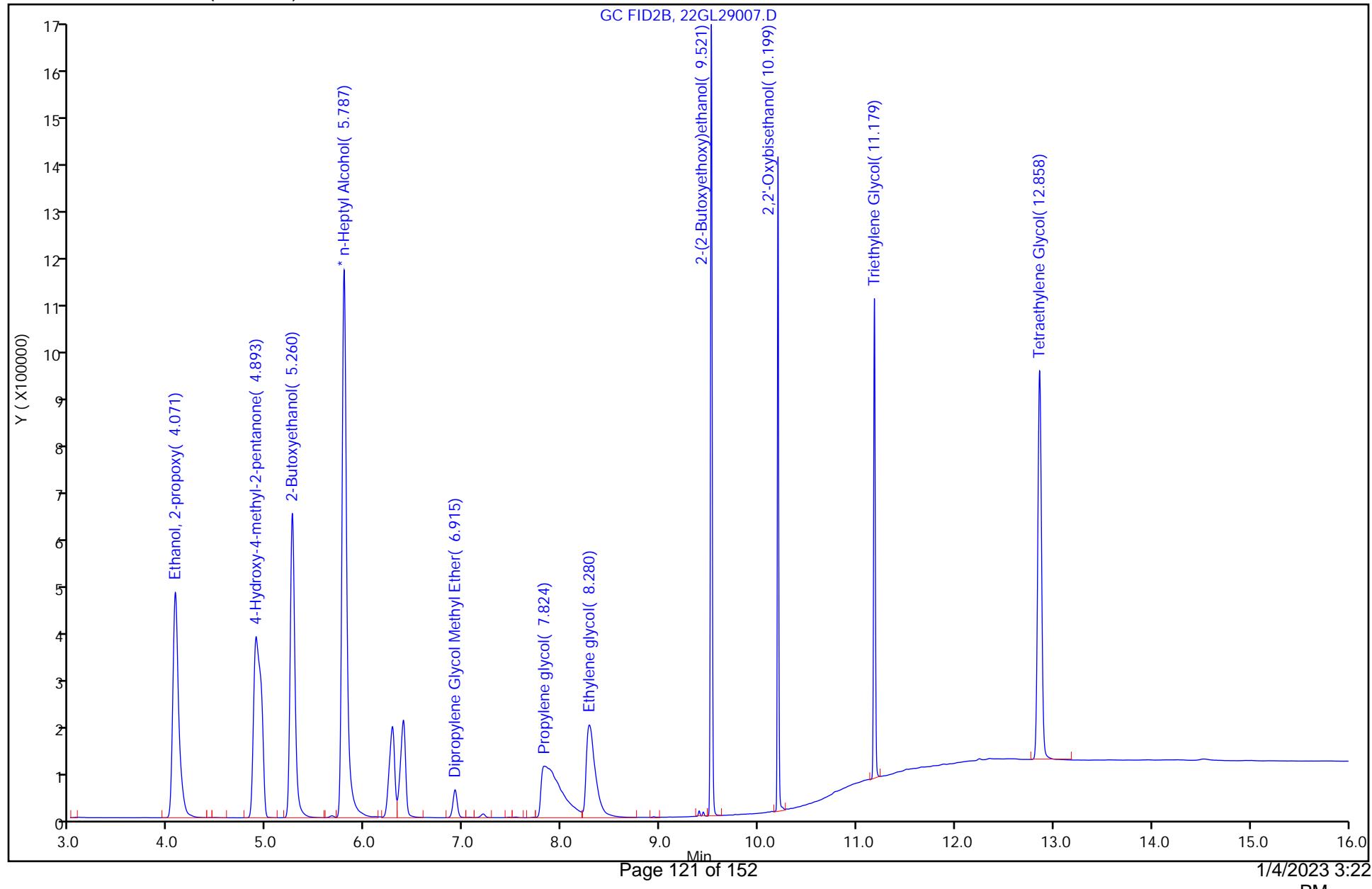
Report Date: 30-Dec-2022 10:54:48

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29007.D
Injection Date: 29-Dec-2022 13:20:21 Instrument ID: CVGG2
Lims ID: LCSD 680-757073/3-A Operator ID:
Client ID:
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 7
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

Worklist Smp#: 7



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Client Sample ID: ADIT6-DU05-SON01MI-22DEC
MS

Lab Sample ID: 580-121397-1 MS

Matrix: Solid (Soluble)

Lab File ID: 22GL29017.D

Analysis Method: 8015C GLY

Date Collected: 12/15/2022 15:10

Extraction Method: _____

Date Extracted: _____

Sample wt/vol: 1 (mL)

Date Analyzed: 12/29/2022 17:06

Con. Extract Vol.: 1 (mL)

Dilution Factor: 10

Injection Volume: 1 (uL)

GC Column: J&W DB WAX ID: 0.45 (mm)

% Moisture: 18.2 % Solids: 81.8

GPC Cleanup: (Y/N) N

Cleanup Factor: _____

Analysis Batch No.: 757248

Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	26	U J1 M	86	26	11

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29017.D
 Lims ID: 580-121397-A-1-K MS
 Client ID: ADIT6-DU05-SON01MI-22DEC
 Sample Type: MS
 Inject. Date: 29-Dec-2022 17:06:30 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 1.0 ul Dil. Factor: 10.0000
 Sample Info: 680-0083017-017
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:09 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SWK1 Date: 30-Dec-2022 10:53:39

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
 5.785 5.785 0.000 7494321 50.0 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00099	Amount Added: 10.00	Units: uL	Run Reagent
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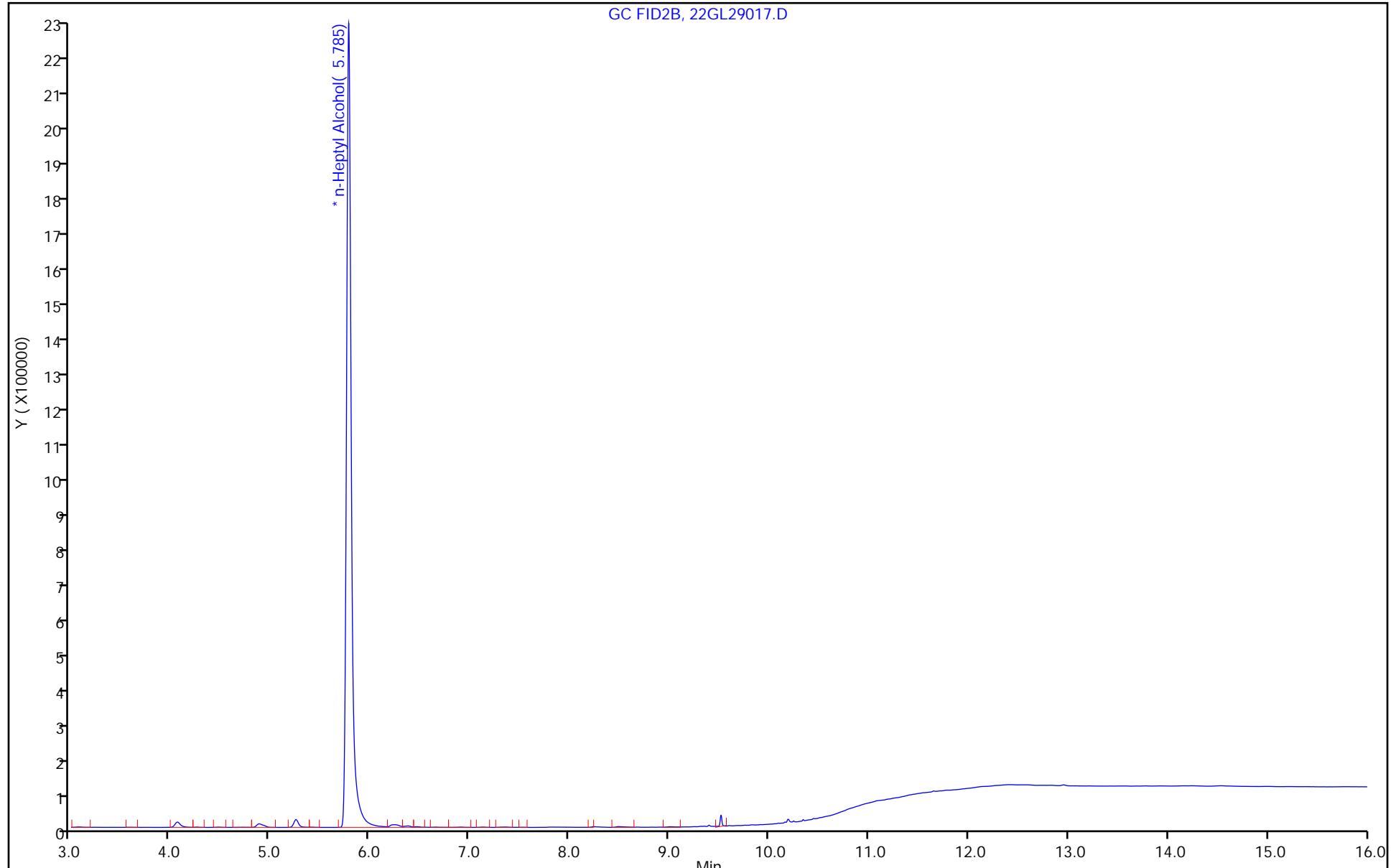
Report Date: 30-Dec-2022 10:54:45

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29017.D
Injection Date: 29-Dec-2022 17:06:30 Instrument ID: CVGG2
Lims ID: 580-121397-A-1-K MS Operator ID:
Client ID: ADIT6-DU05-SON01MI-22DEC Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 10.0000 ALS Bottle#: 17
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL29017.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Client Sample ID: ADIT6-DU05-SON01MI-22DEC
MSD

Lab Sample ID: 580-121397-1 MSD

Matrix: Solid (Soluble)

Lab File ID: 22GL29018.D

Analysis Method: 8015C GLY

Date Collected: 12/15/2022 15:10

Extraction Method: _____

Date Extracted: _____

Sample wt/vol: 1 (mL)

Date Analyzed: 12/29/2022 17:29

Con. Extract Vol.: 1 (mL)

Dilution Factor: 1

Injection Volume: 1 (uL)

GC Column: J&W DB WAX ID: 0.45 (mm)

% Moisture: 18.2 % Solids: 81.8

GPC Cleanup: (Y/N) N

Cleanup Factor: _____

Analysis Batch No.: 757248

Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	2.6	U M J1	8.6	2.6	1.1

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29018.D
 Lims ID: 580-121397-B-1-B MSD
 Client ID: ADIT6-DU05-SON01MI-22DEC
 Sample Type: MSD
 Inject. Date: 29-Dec-2022 17:29:04 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 680-0083017-018
 Operator ID: Instrument ID: CVGG2
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:09 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SWK1 Date: 30-Dec-2022 10:53:51

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
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* 4 n-Heptyl Alcohol
5.783 5.785 -0.002 6991337 50.0 50.0

Reagents:

SG_GLY_ISTD_00099 Amount Added: 10.00 Units: uL Run Reagent

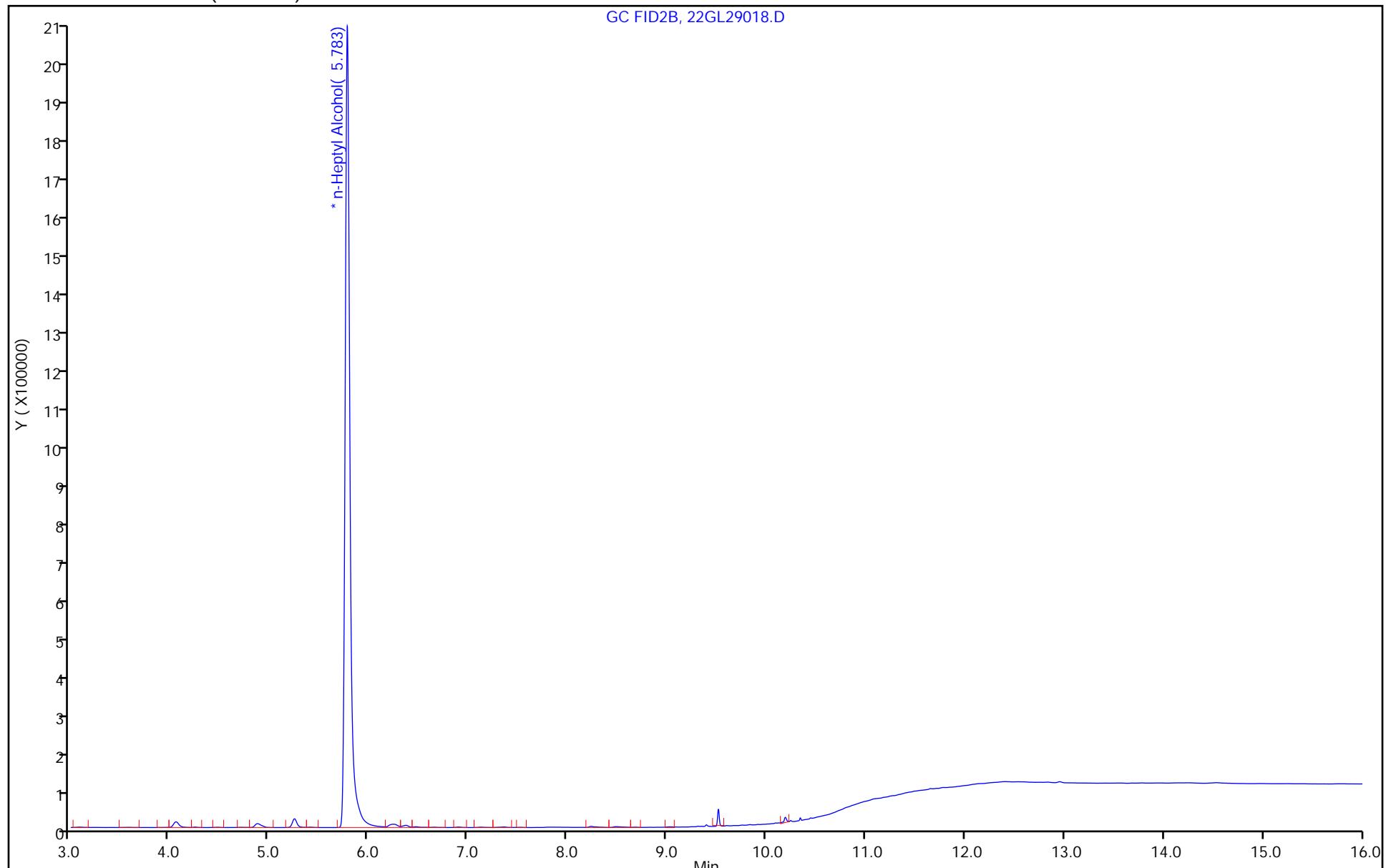
Report Date: 30-Dec-2022 10:54:45

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29018.D
Injection Date: 29-Dec-2022 17:29:04 Instrument ID: CVGG2
Lims ID: 580-121397-B-1-B MSD Operator ID:
Client ID: ADIT6-DU05-SON01MI-22DEC Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 18
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL29018.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Client Sample ID: ADIT6-DU05-SON01MI-22DEC
DU

Lab Sample ID: 580-121397-1 DU

Matrix: Solid (Soluble)

Lab File ID: 22GL29012.D

Analysis Method: 8015C GLY

Date Collected: 12/15/2022 15:10

Extraction Method: _____

Date Extracted: _____

Sample wt/vol: 1 (mL)

Date Analyzed: 12/29/2022 15:13

Con. Extract Vol.: 1 (mL)

Dilution Factor: 10

Injection Volume: 1 (uL)

GC Column: J&W DB WAX ID: 0.45 (mm)

% Moisture: 18.2 % Solids: 81.8

GPC Cleanup: (Y/N) N

Cleanup Factor: _____

Analysis Batch No.: 757248

Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	27	U M Q	89	27	11

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29012.D
 Lims ID: 580-121397-A-1-J DU
 Client ID: ADIT6-DU05-SON01MI-22DEC
 Sample Type: DU
 Inject. Date: 29-Dec-2022 15:13:23 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 10.0000
 Sample Info: 680-0083017-012 Instrument ID: CVGG2
 Operator ID:
 Method: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:09 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221228-82994.b\\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SWK1 Date: 30-Dec-2022 10:53:04

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
--------------	------------------	------------------	----------	------------------	--------------------	-------

* 4 n-Heptyl Alcohol
 5.785 5.785 0.000 7892281 50.0 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00099 Amount Added: 10.00 Units: uL Run Reagent

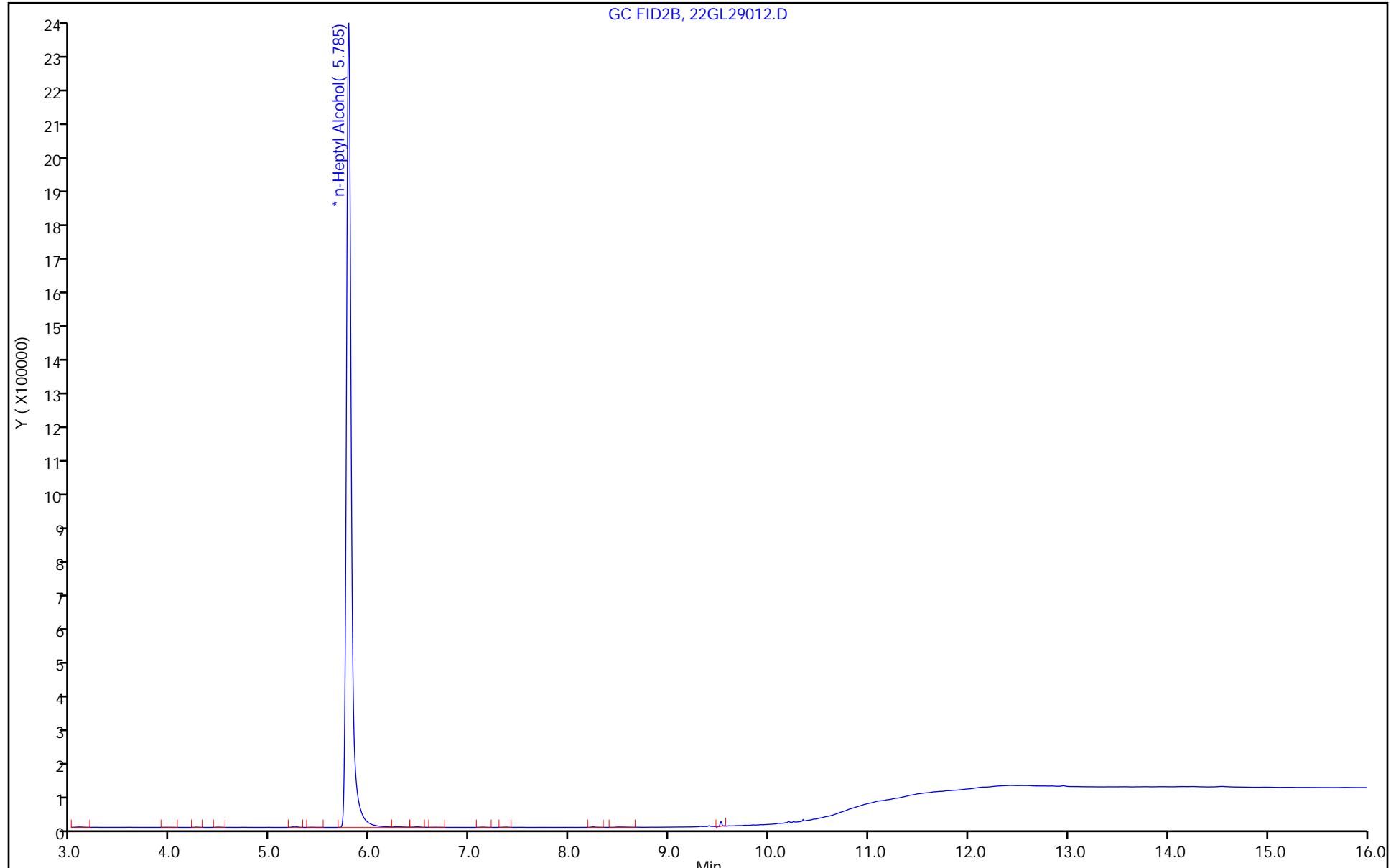
Report Date: 30-Dec-2022 10:54:43

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29012.D
Injection Date: 29-Dec-2022 15:13:23 Instrument ID: CVGG2
Lims ID: 580-121397-A-1-J DU Operator ID:
Client ID: ADIT6-DU05-SON01MI-22DEC Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 10.0000 ALS Bottle#: 12
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL29012.D



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.: _____

Client Sample ID: ADIT6-DU05-SON01MI-22DEC
TRL

Lab Sample ID: 580-121397-1 TRL

Matrix: Solid (Soluble)

Lab File ID: 22GL29013.D

Analysis Method: 8015C GLY

Date Collected: 12/15/2022 15:10

Extraction Method: _____

Date Extracted: _____

Sample wt/vol: 1 (mL)

Date Analyzed: 12/29/2022 15:36

Con. Extract Vol.: 1 (mL)

Dilution Factor: 10

Injection Volume: 1 (uL)

GC Column: J&W DB WAX ID: 0.45 (mm)

% Moisture: 18.2 % Solids: 81.8

GPC Cleanup: (Y/N) N

Cleanup Factor: _____

Analysis Batch No.: 757248

Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
112-34-5	2-(2-Butoxyethoxy)ethanol	27	U Q	89	27	11

Eurofins Savannah
Target Compound Quantitation Report

Data File: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\22GL29013.D
 Lims ID: 580-121397-B-1-A TRL
 Client ID: ADIT6-DU05-SON01MI-22DEC
 Sample Type: TRL
 Inject. Date: 29-Dec-2022 15:36:24 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 10.0000
 Sample Info: 680-0083017-013 Instrument ID: CVGG2
 Operator ID:
 Method: \\chromfs\Savannah\ChromData\CVGG2\20221229-83017.b\8015_GLY_VGG.m
 Limit Group: 8015C_DAI
 Last Update: 30-Dec-2022 10:54:09 Calib Date: 28-Dec-2022 14:52:34
 Integrator: Falcon
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Savannah\ChromData\CVGG2\20221228-82994.b\22GL28010.D
 Column 1 : J&W DB WAX (0.45 mm) Det: GC FID2B
 Process Host: CTX1661

First Level Reviewer: SWK1 Date: 30-Dec-2022 10:53:10

RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
--------------	------------------	------------------	----------	------------------	--------------------	-------

* 4 n-Heptyl Alcohol
 5.785 5.785 0.000 7874537 50.0 50.0

QC Flag Legend

Processing Flags

Reagents:

SG_GLY_ISTD_00099 Amount Added: 10.00 Units: uL Run Reagent

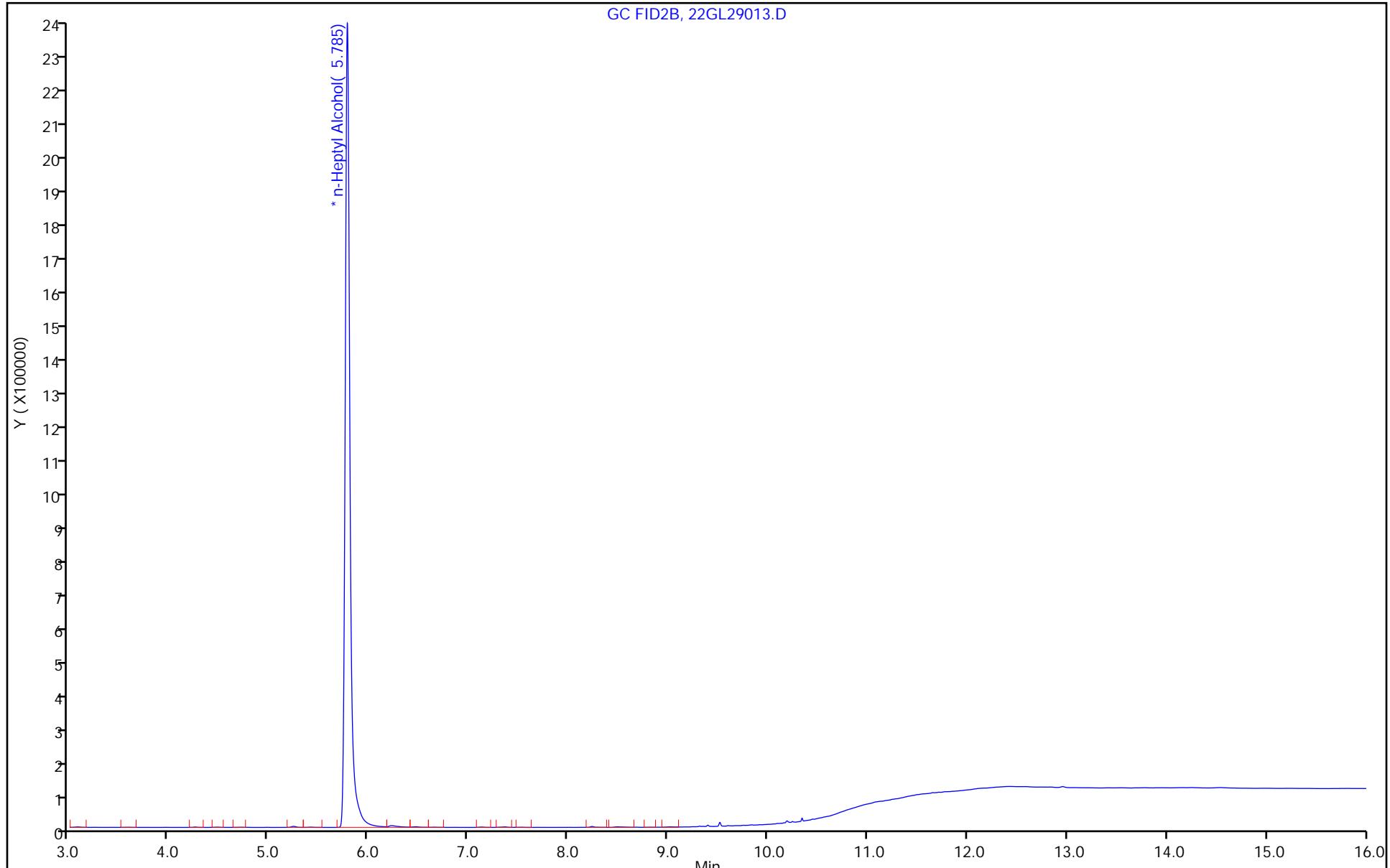
Report Date: 30-Dec-2022 10:54:43

Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Savannah

Data File: \\chromfs\\Savannah\\ChromData\\CVGG2\\20221229-83017.b\\22GL29013.D
Injection Date: 29-Dec-2022 15:36:24 Instrument ID: CVGG2
Lims ID: 580-121397-B-1-A TRL Operator ID:
Client ID: ADIT6-DU05-SON01MI-22DEC Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 10.0000 ALS Bottle#: 13
Method: 8015_GLY_VGG Limit Group: 8015C_DAI
Column: J&W DB WAX (0.45 mm)

GC FID2B, 22GL29013.D



GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-121397-1

SDG No.: _____

Instrument ID: CVGG2 Start Date: 12/28/2022 12:59Analysis Batch Number: 757067 End Date: 12/28/2022 20:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 680-757067/5		12/28/2022 12:59	1	22GL28005.D	J&W DB WAX 0.45 (mm)
IC 680-757067/6		12/28/2022 13:22	1	22GL28006.D	J&W DB WAX 0.45 (mm)
ICIS 680-757067/7		12/28/2022 13:44	1	22GL28007.D	J&W DB WAX 0.45 (mm)
IC 680-757067/8		12/28/2022 14:07	1	22GL28008.D	J&W DB WAX 0.45 (mm)
IC 680-757067/9		12/28/2022 14:29	1	22GL28009.D	J&W DB WAX 0.45 (mm)
IC 680-757067/10		12/28/2022 14:52	1	22GL28010.D	J&W DB WAX 0.45 (mm)
ICV 680-757067/11 CCV		12/28/2022 15:15	1	22GL28011.D	J&W DB WAX 0.45 (mm)
ZZZZZ		12/28/2022 15:37	1		J&W DB WAX 0.45 (mm)
ZZZZZ		12/28/2022 16:00	1		J&W DB WAX 0.45 (mm)
ZZZZZ		12/28/2022 17:08	1		J&W DB WAX 0.45 (mm)
ZZZZZ		12/28/2022 17:30	1		J&W DB WAX 0.45 (mm)
ZZZZZ		12/28/2022 17:53	1		J&W DB WAX 0.45 (mm)
ZZZZZ		12/28/2022 18:15	1		J&W DB WAX 0.45 (mm)
ZZZZZ		12/28/2022 18:38	1		J&W DB WAX 0.45 (mm)
ZZZZZ		12/28/2022 19:00	1		J&W DB WAX 0.45 (mm)
ZZZZZ		12/28/2022 19:45	1		J&W DB WAX 0.45 (mm)
ZZZZZ		12/28/2022 20:08	1		J&W DB WAX 0.45 (mm)
CCV 680-757067/26		12/28/2022 20:53	1		J&W DB WAX 0.45 (mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins Savannah Job No.: 580-121397-1

SDG No.: _____

Instrument ID: CVGG2 Start Date: 12/29/2022 12:33Analysis Batch Number: 757248 End Date: 12/29/2022 22:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 680-757248/5		12/29/2022 12:33	1	22GL29005.D	J&W DB WAX 0.45 (mm)
LCS 680-757073/2-A		12/29/2022 12:57	1	22GL29006.D	J&W DB WAX 0.45 (mm)
LCSD 680-757073/3-A		12/29/2022 13:20	1	22GL29007.D	J&W DB WAX 0.45 (mm)
MB 680-757073/1-A		12/29/2022 14:28	1	22GL29010.D	J&W DB WAX 0.45 (mm)
580-121397-1	ADIT6-DU05-SON01MI-22 DEC	12/29/2022 14:50	10	22GL29011.D	J&W DB WAX 0.45 (mm)
580-121397-1 DU	ADIT6-DU05-SON01MI-22 DEC DU	12/29/2022 15:13	10	22GL29012.D	J&W DB WAX 0.45 (mm)
580-121397-1 TRL	ADIT6-DU05-SON01MI-22 DEC TRL	12/29/2022 15:36	10	22GL29013.D	J&W DB WAX 0.45 (mm)
580-121397-2	ADIT6-DU06-SON01MI-22 DEC	12/29/2022 15:58	1	22GL29014.D	J&W DB WAX 0.45 (mm)
580-121397-3	ADIT6-DU07-SON01MI-22 DEC	12/29/2022 16:21	10	22GL29015.D	J&W DB WAX 0.45 (mm)
580-121397-4	ADIT6-DU08-SON01MI-22 DEC	12/29/2022 16:43	1	22GL29016.D	J&W DB WAX 0.45 (mm)
580-121397-1 MS	ADIT6-DU05-SON01MI-22 DEC MS	12/29/2022 17:06	10	22GL29017.D	J&W DB WAX 0.45 (mm)
580-121397-1 MSD	ADIT6-DU05-SON01MI-22 DEC MSD	12/29/2022 17:29	1	22GL29018.D	J&W DB WAX 0.45 (mm)
ZZZZZ		12/29/2022 17:51	1		J&W DB WAX 0.45 (mm)
ZZZZZ		12/29/2022 18:14	1		J&W DB WAX 0.45 (mm)
ZZZZZ		12/29/2022 18:36	10		J&W DB WAX 0.45 (mm)
ZZZZZ		12/29/2022 18:59	10		J&W DB WAX 0.45 (mm)
CCV 680-757248/24		12/29/2022 19:44	1	22GL29024.D	J&W DB WAX 0.45 (mm)
ZZZZZ		12/29/2022 20:52	10		J&W DB WAX 0.45 (mm)
ZZZZZ		12/29/2022 21:15	10		J&W DB WAX 0.45 (mm)
ZZZZZ		12/29/2022 21:37	10		J&W DB WAX 0.45 (mm)
ZZZZZ		12/29/2022 22:00	10		J&W DB WAX 0.45 (mm)
ZZZZZ		12/29/2022 22:23	10		J&W DB WAX 0.45 (mm)
ZZZZZ		12/29/2022 22:45	10		J&W DB WAX 0.45 (mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.:

Batch Number: 757067

Batch Start Date: 12/28/22 12:59

Batch Analyst: Meincke, Griffin E

Batch Method: 8015C GLY

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Final Amount	SG_Gly_CAL 00047	SG_GLY_ISTD 00099	SG_GlyICV 00056		
IC 680-757067/5		8015C GLY		1 mL	2.5 uL	10 uL			
IC 680-757067/6		8015C GLY		1 mL	5 uL	10 uL			
ICIS 680-757067/7		8015C GLY		1 mL	10 uL	10 uL			
IC 680-757067/8		8015C GLY		1 mL	25 uL	10 uL			
IC 680-757067/9		8015C GLY		1 mL	40 uL	10 uL			
IC 680-757067/10		8015C GLY		1 mL	50 uL	10 uL			
ICV 680-757067/11		8015C GLY		1 mL		10 uL	10 uL		
CCV									

Batch Notes

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Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8015C GLY

Page 1 of 1

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.:

Batch Number: 757073

Batch Start Date: 12/28/22 11:59

Batch Analyst: Meincke, Griffin E

Batch Method: DI Leach

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	SG_Gly CAL 00047			
MB 680-757073/1		DI Leach, 8015C GLY		5.32 g	5 mL				
LCS 680-757073/2		DI Leach, 8015C GLY		5.06 g	5 mL	100 uL			
LCSD 680-757073/3		DI Leach, 8015C GLY		5.28 g	5 mL	100 uL			
580-121397-C-1	ADIT6-DU05-SON01 MI-22DEC	DI Leach, 8015C GLY	S	10.23 g	15 mL				
580-121397-A-1 DU	ADIT6-DU05-SON01 MI-22DEC	DI Leach, 8015C GLY	S	10.34 g	15 mL				
580-121397-B-1 TRL	ADIT6-DU05-SON01 MI-22DEC	DI Leach, 8015C GLY	S	10.30 g	15 mL				
580-121397-B-2	ADIT6-DU06-SON01 MI-22DEC	DI Leach, 8015C GLY	S	10.11 g	10 mL				
580-121397-B-3	ADIT6-DU07-SON01 MI-22DEC	DI Leach, 8015C GLY	S	10.43 g	15 mL				
580-121397-B-4	ADIT6-DU08-SON01 MI-22DEC	DI Leach, 8015C GLY	S	10.47 g	15 mL				
580-121397-A-1 MS	ADIT6-DU05-SON01 MI-22DEC	DI Leach, 8015C GLY	S	10.69 g	15 mL	100 uL			
580-121397-B-1 MSD	ADIT6-DU05-SON01 MI-22DEC	DI Leach, 8015C GLY	S	10.70 g	15 mL	100 uL			

Batch Notes

Balance ID	36
Blank Matrix ID	7808152
Tumble Start Time	12/28/2022 13:58
Tumble End Time	12/28/2022 14:00

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8015C GLY

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GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.:

Batch Number: 757248

Batch Start Date: 12/29/22 12:33

Batch Analyst: Kellar, Joshua C

Batch Method: 8015C GLY

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Final Amount	SG_Gly_CAL_00047	SG,GLY,ISTD_00099			
CCVIS 680-757248/5		8015C GLY		1 mL	10 uL	10 uL			
LCS 680-757073/2-A		8015C GLY		1 mL		10 uL			
LCSD 680-757073/3-A		8015C GLY		1 mL		10 uL			
MB 680-757073/1-A		8015C GLY		1 mL		10 uL			
580-121397-C-1-A	ADIT6-DU05-SON01 MI-22DEC	8015C GLY	S	1 mL		10 uL			
580-121397-A-1-J DU	ADIT6-DU05-SON01 MI-22DEC	8015C GLY	S	1 mL		10 uL			
580-121397-B-1-A TRL	ADIT6-DU05-SON01 MI-22DEC	8015C GLY	S	1 mL		10 uL			
580-121397-B-2-A	ADIT6-DU06-SON01 MI-22DEC	8015C GLY	S	1 mL		10 uL			
580-121397-B-3-A	ADIT6-DU07-SON01 MI-22DEC	8015C GLY	S	1 mL		10 uL			
580-121397-B-4-A	ADIT6-DU08-SON01 MI-22DEC	8015C GLY	S	1 mL		10 uL			
580-121397-A-1-K MS	ADIT6-DU05-SON01 MI-22DEC	8015C GLY	S	1 mL		10 uL			
580-121397-B-1-B MSD	ADIT6-DU05-SON01 MI-22DEC	8015C GLY	S	1 mL		10 uL			
CCV 680-757248/24		8015C GLY		1 mL	10 uL	10 uL			

Batch Notes

Basis	Basis Description
S	Soluble

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8015C GLY

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GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Savannah Job Number: 580-121397-1

SDG No.: _____

Project: Red Hill - AFFF Assessment Sampling

Client Sample ID	Lab Sample ID
<u>ADIT6-DU05-SON01MI-22DEC</u>	<u>580-121397-1</u>
<u>ADIT6-DU06-SON01MI-22DEC</u>	<u>580-121397-2</u>
<u>ADIT6-DU07-SON01MI-22DEC</u>	<u>580-121397-3</u>
<u>ADIT6-DU08-SON01MI-22DEC</u>	<u>580-121397-4</u>

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Savannah

Job Number: 580-121397-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

LOQ Date: 01/01/2005 13:43

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.01	
Percent Solids		0.01	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Savannah

Job Number: 580-121397-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

XRL Date: 04/09/2011 17:03

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		0.01	
Percent Solids		0.01	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.:

Instrument ID: NOEQUIP

Analysis Method: Moisture

Start Date: 12/28/2022 13:21

End Date: 12/28/2022 13:21

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.:

Instrument ID: NOEQUIP

Analysis Method: Moisture

Start Date: 12/28/2022 13:21

End Date: 12/28/2022 13:21

Prep Types:

T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Savannah

Job No.: 580-121397-1

SDG No.:

Batch Number: 757069

Batch Start Date: 12/28/22 13:21

Batch Analyst: Faison, Karrin-Cheryl

Batch Method: Moisture

Batch End Date: 12/28/22 17:39

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry	%_Moisture	%_Solid	
580-121397-B-1	ADIT6-DU05-SON01 MI-22DEC	Moisture	T	1.31 g	11.34 g	9.51 g	18.245264207377 9 %	81.754735792622 1 %	
580-121397-C-2	ADIT6-DU06-SON01 MI-22DEC	Moisture	T	1.30 g	11.38 g	9.26 g	21.031746031746 %	78.968253968254 %	
580-121397-C-3	ADIT6-DU07-SON01 MI-22DEC	Moisture	T	1.31 g	11.81 g	9.01 g	26.666666666666 7 %	73.333333333333 3 %	
580-121397-C-4	ADIT6-DU08-SON01 MI-22DEC	Moisture	T	1.31 g	11.64 g	9.73 g	18.489835430784 1 %	81.510164569215 9 %	

Batch Notes

Balance ID	35
Oven ID	OVEN J
Thermometer ID	OVEN J
Date samples were placed in the oven	12/28/2022
Time samples were place in the oven	13:21
Temperature - Start - Uncorrected	106.8 Degrees C
Oven Temp In	106.5 Degrees C
Date samples were removed from oven	12/28/2022
Time Samples were removed from oven	17:39
Temperature - End - Uncorrected	106.0 Degrees C
Oven Temp Out	105.7 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Moisture

Page 1 of 1

General Chemistry Raw Data Report

Job ID: 580-121397-1

Batch: 757069

Method: Moisture

Analyst Initials: KF

Instrument: No Equipment Assigned to The Batch

Lab Sample ID: 580-121397-B-1

Analysis Date: Dec 28, 2022 13:21

Analyte	Detector	Dilution	Raw Result	Unit
Percent Moisture	None	1	18.2452642073779	%
Percent Solids	None	1	81.7547357926221	%

Lab Sample ID: 580-121397-C-2

Analysis Date: Dec 28, 2022 13:21

Analyte	Detector	Dilution	Raw Result	Unit
Percent Moisture	None	1	21.031746031746	%
Percent Solids	None	1	78.968253968254	%

Lab Sample ID: 580-121397-C-3

Analysis Date: Dec 28, 2022 13:21

Analyte	Detector	Dilution	Raw Result	Unit
Percent Moisture	None	1	26.66666666666667	%
Percent Solids	None	1	73.3333333333333	%

Lab Sample ID: 580-121397-C-4

Analysis Date: Dec 28, 2022 13:21

Analyte	Detector	Dilution	Raw Result	Unit
Percent Moisture	None	1	18.4898354307841	%
Percent Solids	None	1	81.5101645692159	%

Subcontract Data

Shipping and Receiving Documents

Chain of Custody Record

Ver. 01/16/2019

Chain of Custody Record

Ver. 01/16/2019

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-121397-1

Login Number: 121397

List Source: Eurofins Seattle

List Number: 1

Creator: Presley, Kim A

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-121397-1

Login Number: 121397

List Number: 2

Creator: Sims, Robert D

List Source: Eurofins Savannah

List Creation: 12/23/22 11:46 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received extra samples not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	